ART Sub Regional Plan

Report of Objectives and Strategies:

Recommended Option

Anahim Round Table Sub Regional Plan
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ACKNOWLEDGEMENTS

This plan is the result of the work and contributions of many people. The Inter-agency Planning Team (IPT) would like to thank and acknowledge the people who contributed to the plan.

A special thank you goes to the community and the stakeholder groups who sat on the Round Table, some for many years. Your input and work is invaluable. Success of this plan would not be possible without you.

We greatly appreciate the efforts of all the other people who we worked with who provided information, guidance, and support, including our co-workers, the members of the Inter-Agency Management Committee (IAMC), and the members of the Implementation Committee.

Thank you all.

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this report is to present the results of the Anahim Round Table Sub› Regional planning process. The Sub Regional Plan (SRP) was developed in accordance with the Cariboo-Chilcotin Land-Use Plan (CCLUP), and subsequent government direction delivered by the IAMC. This SRP was developed using a "round table" approach. The Anahim Round Table consists of community members and stakeholders and the Interagency Planning Team, (IPT) consisting of government agency representatives.

All land use and resource management activities in the Anahim Round Table SRP are subject to legislation, policies, and regulations for crown land and resource management. This SRP will indicate a mechanism to meet the targets of the CCLUP, provide information to statutory decision makers and landscape level planning, and guidance to planners at the operational level. The SRP will also inform the public and other stakeholders as to the types of activities that are acceptable under the plan and the locations where those activities may occur.

1.2 Plan Area

The interest area of the Anahim Round Table SRP is defined within the Chilcotin Forest District from the perspective of the community including local resource users and the Ulkatcho Band. The boundary extends from Kleena Kleene in the south to the Chilcotin District boundary to the north and from Tweedsmuir Park in the west to the eastern watershed boundaries of the Dean and the Klinaklini rivers including the upper Blackwater. See Plan Area Map.

The area encompassed by the plan is approximately 680,695 hectares and includes the Charlotte Aplands Special Resource Development Zone (SRDZ), the south western portion of the Itcha Ilgachuz SRDZ, the Kleena Kleene Integrated Resource Management Zone (IRMZ), and the Anahim IRMZ.

1.3 Goals

The goals of the Anahim Round Table SRP are to provide a mechanism by which the targets of the CCLUP can be achieved, and to provide statutory decision makers and operational planners with information and guidance for future resource decision making.

This is achieved by:

- co-ordinating the strategies and targets set out in the CCLUP and the *Forest Practices Code of British Columbia Act),* (FPC),
- gathering and considering input from the Round Table, public, and stakeholders regarding local land use values, and
- maximising overlaps among values as much as possible to reduce the impact of the plan on access to resources.

This SRP does not revisit the land use designation, targets, or strategies laid out in the CCLUP. The SRP does not address how much timber volume is available for harvest under the allowable annual cut (AAC), determination made by the Chief Forester. The Anahim Supply Block within the Williams Lake Timber Supply Area, (TSA), is the area used to determine the AAC through the Timber Supply Review Process.

1.4 Highlights of the Plan

The following is a list of the major highlights of the ART SRP;

1) The designation of Community Areas of Special Concern, (CASC), including the Charlotte Alplands and the Dean River Corridor, with the intention that there will be no commercial harvesting in these areas. See Map 1 showing all the CASC's for the ART SRP area,
2) The Enhanced scenario for Biodiversity Emphasis Option, (BEO), which requires four landscape units to be increased from low to intermediate BEO and another four from intermediate to high BEO, See Map 8,
3) The placement of a 1250 hectare Goal II area in the Kleena Kleene valley, See Map 2,
4) As a result of community workshops, the placement of the required residual and transitional Old Growth Management Areas, (OGMA's), across the Anahim Round Table planning area as outlined by the Biodiversity Conservation Strategy and using the enhanced BEO scenario. See Map 9,
5) Formulation of objectives and strategies for all sectors explored within this plan, to be used as guidance when Landscape unit objectives and strategies are being developed.

2.0 PLAN DEVELOPMENT

2.1 Background

The primary communities within the planning area are Anahim Lake, Nimpo Lake, and Kleena Kleene. For many years, residents of the Anahim Lake area have exhibited a high level of interest in natural resource management issues. The award of the ten year forest license to Carrier Lumber Ltd. in 1983 heightened this interest. Many individuals felt that the introduction of modern forest management threatened their lifestyle or business, or both. The period from 1983 to the present has been characterised by integration of timber harvesting with more traditional uses such as ranching and tourism. Community resource associations were established in Kleena Kleene and Anahim Lake (West Chilcotin Community Resource Association, WCCRA), in an effort to influence and improve resource management at a local level.

In July of 1992, the Anahim Round Table (ART) was established as a Pilot Project by the Commission on Resources and the Environment. The Table was mandated to test a shared decision making approach to resolving resource management conflicts at a local level. The Table included representatives from government agencies, native bands, community associations, recreation associations, and those with an economic interest in the land base.

The Anahim Round Table Resource Management Plan was jointly signed off in January, 1994. This plan designates resource management guidelines and recommendations which provided direction to operational planning within the planning area.

In October of 1994 the government announced the CCLUP, establishing resource management zones and protected areas. In February of 1995, the CCLUP 90 Day Implementation Process Final Report was released providing targets for various resource interests in the resource management zones. On January 31, 1996, the CCLUP was declared a higher level plan under the FPC.

A Regional Resource Board (RRB) was formed comprised of representatives from stakeholder groups involved with formulating the land use plan. The role of the Regional Resource Board is to direct the implementation of the CCLUP jointly with the IAMC. Government provided further guidance with the Final Integration Report in April of 1998.

In the spring of 1996, the IPT was formed to carry out sub regional planning over the planning area jointly with the Round Table. Meetings were held on a monthly basis in the community of Anahim Lake and sometimes at Nimpo Lake. A Scoping Report and ART SRP Terms of Reference, (Appendix I), were developed, agreed upon, and endorsed by IAMC and RRB. Analysis work was ongoing throughout the process as resources permitted and the results are outlined in this document

3.0 FIRST NATIONS

The Ulkatcho Band has the largest amount of their traditional territory within the plan area and participated to the greatest degree in meetings. The Natural Resource and Culture Committee (NRC) has also played a valuable role after their formulation.

The Ulkatcho and the Redstone Indian Band met early in the SRP process to agree on the southern boundary of the ART SRP planning Area.

First Nations have been encouraged to participate in the planning process.

First Nations input and involvement has included attendance at the Anahim Round Table meetings and workshops, and provision of information to be used in the planning process.

Government remains committed to working with First Nations on a government to government basis with the understanding that it will not limit aboriginal rights or treaty negotiations.

This document will not limit aboriginal rights and treaty negotiations.

4.0 TARGETS AND STRATEGIES

4.1 Goal 2 Areas

Background

British Columbia's Protected Areas Strategy (PAS) is the key policy that guides the planning, management and identification of parks and protected areas in British Columbia. PAS sets out government's commitment to protect 12% of the province on a representative basis by the year 2000. PAS has two main goals:

Goal 1

To protect viable, representative examples of natural diversity of the province, representative of the major terrestrial, marine, and freshwater ecosystems, characteristic habitats, hydrology and landforms, and characteristic backcountry recreational and cultural heritage values.

Goal 2

To protect special natural, cultural heritage and recreational features, including rare and endangered species and critical habitats, outstanding or unique botanical, zoological, geological and paleotological features, outstanding or fragile cultural heritage features and outstanding recreational features.

In 1994, the Cariboo Chilcotin Land Use Plan (CCLUP) created 17 large new Goal 1 Parks and Protected Areas, including Itcha Ilgachuz Parks. These new Protected Areas, combined with existing parks, totalled 11.75% of the region. As part of government's 12% commitment, the remaining 0.25% of the region (22,000 hectares) were allocated to smaller Goal 2 areas. Goal 2 areas were to be identified during Subregional Planning process according to the following CCLUP guidelines:

Of the 22,000 hectares to be allocated to Goal 2 areas, only 75% (or 16,500 hectares) would be available to the planning tables to address park and protected area recommendations. The remaining 25% (5,500 hectares) would be retained by the Interagency Management Committee and Regional Resources Board (IAMC/RRB) to address regional priorities.

The available Goal 2 area that each sub regional planning table could use was determined by, dividing the total Regional allocation of 16,500 hectares by the total Cariboo Forest Region Area, and then multiplying that factor by the sub regional planning area. For the Anahim Subregional Plan area, Goal 2 allocation translates to approximately 1200 hectares.

Process

The Anahim Sub Regional Planning Process examined 4 government candidate Goal 2 areas and 2 community proposed candidates. Meetings were held with interested community members on March 14th, 2000 in Anahim Lake and on May 9, 2000 in Kleena Kleene. As a result of these meetings the four government candidate areas were dropped and two community proposals, Precipice and Klinaklini River, examined. A presentation to the full ART SRP table was made in July on the two community proposals and agreement given by the table to support the Klinaklini proposal.

Recommendation: Klinaklini River

The Inter Agency Planning team (IPT) recommends the use of 1250 hectares to create a Class A Park on the Klinaklini River. (See Map 2).

Description of Candidate Area

Size

The area takes in 1,250 hectares along the Klinaklini River including Klinaklini Lake.

Representation and Values

This proposal would protect a portion of the Western Chilcotin Ranges Ecosection and portions of the IDFdw and IDFww biogeoclimatic ecosystem classification, (BEC) subzones. In the Cariboo Region, Tweedsmuir Park and Homathko Protected Area also protect portions of these subzones.

The proposal would protect rich riparian bottomland along the meanders of the Klinaklini River. Vegetation is heavily influenced by the warm, moderating effects of the coast. Deciduous tree species dominate the proposal with very large cottonwood, birch, willow and aspen and a shrub layer of rose, elder berry, willow and alder. Only small patches of old growth Douglas fir and spruce occur within the proposal but provide important thermal cover for ungulates and habitat for fur bearers. Large sedge meadows (greater than 10 hectares) exist adjacent to the river and are subject to seasonal flooding resulting in rich mineral soils.

Fisheries values in the Klinaklini river and tributaries are high, and include Bull Trout, which is a blue listed species. Rainbow trout are also common. Large tributary streams to the Klinaklini such as Clearwater and Coldwater Creeks provide important spawning habitat for both Bull and Rainbow trout

The proposal contains important wildlife habitat, particularly for moose and grizzly. For moose the extensive stands of willow provide important forage and thermal cover is provided by mature Douglas fir and spruce. The large sedge meadows provide important spring and early summer forage for grizzly bears. Excellent riparian habitat is also available for beaver, fisher and marten.

Boundary Intent

For specific details on the boundary see Appendix II.

Management Intent

The area will be managed for wilderness and natural values such as wildlife, vegetation and fisheries.

Public Support

This candidate was submitted by the public and endorsed by the Anahim Round Table.

First Nations

This candidate is in the area of interest of the Ulkatcho and Kwakiutl First Nations.

Land Status

Crown Land, no private land. Two Licenses of Occupation through BCAL.

Additional Recommendations

a) that IAMC formally delete the four CCLUP Goal 2 candidates from further consideration;
b) that IAMC request a no-staking reserve be established on the Klinaklini candidate, once the SRP recommendations reach final draft stage; and
c) that IAMC request, at the same time, removal of no-staking reserves on deleted candidates.

4.2 Access Management

The Anahim Round Table, (ART) established the Access Management Sub-Committee, (AMSC), in February of 1996 to investigate and develop recommendations for managing access on existing and proposed roads and trails. Although the AMSC was originally assigned the Beeftrail and Corkscrew areas, the committee mandate was later expanded to include all road access within the ART's Interest Area. The concerns expressed in the ART Resource Management Plan relating to access management were the focus of the AMSC. The goal of the AMSC was to develop community based recommendations for access management within the ART interest area.

For each sub-interest area (Beeftrail, Hotnarko), AMSC provided recommendations for managing access of existing and proposed roads consistent with the requirements of the Forest Practices Code, Regulations and standards. These detailed recommendations can be found in the AMSC Final report in Appendix III.

The following are examples of broad objectives taken from the issues and recommendations provided in the AMSC Final Report.

Objectives	***Strategies***
Provide visual obstruction of cutblocks from roads to protect wildlife from increase ease of hunting.	• Establish visual buffers between roads and clear cuts where access control measures do not adequately protect wildlife populations.
Control access to the Itcha-Ilgachuz Provincial Park.	• Road or trail development that provides access to the Itcha-Ilgachuz Provincial Park is to be minimised through effective access planning. Planning will also include the placement of access control measures on all main and spur roads leading to the Park. • Use temporary access control measures on all main and spur roads that provide access to the Itcha-Ilgachuz Provincial Park, when a delay in permanent deactivation is anticipated. • Develop an agreement with First Nations and Tourism operators around access trails to the Park consistent with the ART AMSC Final Report, included in Appendix III.
Minimise road and recreation trail conflicts.	• Identify recreation trail inventory mapping as a high priority. • Continue to identify and map tourism, cultural and recreational trails.
Minimise conflicts with existing stock	• Licensees are to identify stock trails

trails.	early in the preparation of their Forest Development Plans through consultation with range users. When use of pre-existing range or non-status roads is anticipated, consultation with other users is required to allow for planning around the deactivation and stream protection of these roads. • Adjust harvesting schedules to accommodate range use and provide additional cattle management infrastructure, (fencing, cattle guards, post deactivation access provisions) as appropriate.
Provide long term access planning for harvesting and deactivation.	• Plan harvesting activities at the back of a development area and work toward the front. This will allow access roads to be deactivated as the harvesting and the silviculture is completed on the most distal blocks. • Temporary access control measures are to be installed on roads when delays in deactivation are expected. • Ensure access planning has a mechanism in place to avoid the unintentional isolation of timber. • The deactivation strategy is to be identified during the FDP preparation. • Signage should be installed at the beginning of every operational road network where access control points are installed. The signage will provide information on the purpose of the access restrictions as well as identifying the partners in the planning process. • Continue with the AMSC to allow a forum for the development and monitoring of specific access recommendations for specific Sub Interest areas.

4.3 Mining

This section applies to exploration, development and production of geological resources, including:

- minerals, mineral substances, and placer minerals defined by the Mineral Tenure Act;
- rock or natural substance used for construction purposes (e.g., sand, gravel, rip rap) defined by the Land Act;
- coal resources defined by the Coal Act;
- activities defined and regulated by the Mines Act, Health, Safety and Reclamation Code for Mines in BC, Mineral Exploration Code, Mining Right of Way Act, and Mining Rights Amendment Act;

but excluding petroleum, natural gas and geothermal resources[1].

Geological resource development presents unique challenges. The resources themselves are mostly hidden, unquantifiable, and fixed in place. If they are to be recovered at all, they must be developed where they are found. Discovering them requires time, patience, knowledge, and money. International markets drive the search for commodities. Large areas of land and many specific targets need to be evaluated through repeated and expensive exploration campaigns, over a span of years or decades, before a commercially viable deposit is delineated.

In order to sustain the exploration and development process, geological resource developers need security of tenure, security of access for exploration and development, and certainty with respect to other resource values and land uses that must be addressed in tenuring and permit approval processes.

There are additional issues facing some sub-sectors. For the aggregate sub-sector, there is the eventual requirement for Crown land to develop new resources, as reserves on private land are depleted, or are precluded by urban expansion. For the placer sub-sector, there is the need for more operating areas than are currently allowed, in order to remain viable as an industry.

The southern half of the ART SRP area has the highest overall mineral resource values. Consequently, this area is most likely to see future mineral exploration and development activities. At time of writing there were no major mine developments under review (e.g., by interagency referral, Regional Mine Development Review Committee, or Environmental Assessment Office).

Future developments may result in changes to non-mining values such as access management, visual quality, backcountry tourism, recreation, and wildlife. These changes will be reviewed and approved through standard project review or environmental assessment processes. Review processes provide opportunities for public comment[2] on major development proposals.

The purpose of this section is to implement the CCLUP and *90 Day Implementation Report*, with respect to sectoral targets for geological resources. Adaptive management

[1] The Cariboo Mid Coast IAMC is working with the Ministry of Energy and Mines' Petroleum Lands Branch on how best to address petroleum, natural gas, and geothermal resources in sub-regional plans.
[2] Review processes for major projects usually solicit comments from First Nations, local governments, and community groups such as the Anahim Round Table. Opportunities for public comment are available to any interested person or group.

by all resource management agencies and a flexible approach to meeting non-mineral resource targets, in the event that geological resources are developed, are integral parts of the CCLUP. The desired outcome is a prosperous resource industry with access to Crown land for exploration and development.

Objectives	*Strategies*
Allow exploration and development of geological resources throughout the plan area.	• Industry (including free miners, companies and consultants) shall continue to have access to 100% of the plan area[3] (excluding protected areas) for geological resource exploration, development and production.
Maintain appropriate access for geological resource developers.	• Future planning or regulatory activities (e.g., landscape unit plans; access management plans; fish and wildlife regulatory amendments; etc.) should include consultation with geological industry representatives to ensure that plans and regulatory controls on access reasonably accommodate present and future exploration and development activities. • Include geological resource tenuring or regulatory agencies (MEM; BCAL) in future access planning, etc.
Ensure that lands closed to mineral and placer staking through no-staking reserves (NSRs) are periodically reviewed to determine the necessity of the reserves.	• MEM should review no-staking reserves within the plan area, and, in consultation with reserve proponents, amend or remove them as appropriate.
Reinforce the 'legitimacy' of geological exploration and development in all areas where tenure may be acquired.	• This plan recognises that exploration for development of geological resources are acceptable activities within all land use zones, including SRDZ's, but excluding protected areas.
Incorporate non-mining resource values into mine development review processes.	• Encourage statutory decision makers and mine developers to use resource information and maps in this plan in planning and

[3] Areas that are open for geological resource exploration and development include, for example, old growth management areas, no-harvest areas or zones, community areas of special concern, community preservation zones, riparian management areas, stream and lakeshore management zones, forest ecosystem networks, wildlife habitat areas, wildlife corridors, environmentally sensitive areas, roadless areas, wilderness areas, community watersheds, domestic watersheds, forest recreation sites, tourism and backcountry areas, known scenic areas, Agricultural Land Reserve areas, and Forest Land Reserve areas, as well as any areas with identified visual quality objectives, biodiversity emphasis options, recreational opportunity spectrum designations and the like, except where prohibited by law.

	permitting processes for geological resource development. • Recommend that project proponents inform First Nations, local governments, and the Anahim Round Table of work proposals that involve significant disturbance of the surface (e.g., construction of temporary access roads; bulk sampling).
Foster communication among all resource users about mineral development activities.	• Encourage resource users to familiarise themselves with mineral development activities in the plan area via the Internet[4], or by checking for Mines Act referrals at local or regional offices of MOF, MELP or MEM.

4.4 Grazing and Range Management

Objectives	*Strategies*

Maintain or enhance current levels of authorised AUMs in their existing geographic distributions.	• MOF should identify and map areas of significant crown grazing for livestock operations, including:
	  • range use plan area boundaries and key range resource features,
	  • riparian grasslands and high value ranges,
	  • key seasonal ranges,
	  • range developments and cattle watering sites, and
	  • breeding pastures.

	• Develop Range Use Plans (RUPs) in accordance with the RMZ objectives established in Appendix 5.0 of the CCLUP. • Mitigate potential impacts on grazing targets identified by RUP's and land use plans through the provisions of the Grazing Enhancement Fund. • Utilise the Range Enhancement Advisory Committee (REAC) to help address any

[4] The URL is http://www.em.gov.bc.ca. Useful sites include:
- "The Map Place", an interactive, map-based inquiry tool (www.em.gov.bc.ca/Mining/Geolsurv/MapPlace/Default.htm;)
- mineral inventory (MINFILE) database (www.em.gov.bc.ca/Mining/Geolsurv/Minfile/default.htm);
- mineral titles database (www.em.gov.bc.ca/Mining/Titles/TitlesSearch/default.htm); and
- Assessment report (ARIS) database (www.em.gov.bc.ca/Mining/Geolsurv/Aris/default.htm).

	outstanding range management issues and to make recommendations on projects proposed under the Grazing Enhancement Fund. (GEF) • Maximum level of AUMs, in Protected Areas, set at existing levels of authorised AUMs, as of October 24, 1994.
Identify critical gaps of information and technology preventing desired levels of management.	• MOF should Implement long/short term, and adaptive management research projects to address information deficiencies. • Identify the number of hectares of intensive grazing and the number of hectares of critical spring range. • Update current inventories of existing plant communities. • Establish or maintain ungrazed benchmarks within critical grazing ranges to determine Potential Natural Communities, (PNC). • Identify riparian grassland communities by biogeoclimatic zone. • Identify wildlife / livestock interaction concerns and issues.
Maintain sustainability and long-term productivity on Crown rangelands.	• MOF should identify and assess factors affecting Crown range productivity. • Inventory and define desired plant community for key grazing ranges. • Develop and implement management practices to move towards achieving the desired plant community. • Restore areas detrimentally impacted by grazing. • Develop and implement noxious weed prevention and control program.
Maintain or restore the historical riparian grassland component across landscapes.	• Establish a riparian grassland benchmark area for management units using existing databases, (i.e. old inventories, maps and air photos). See section 14.10.2h • Delineate areas of forest encroachment and or destruction of riparian areas that can be restored to grassland. • Implement recommendation from the Grassland Strategy. (e.g. Using harvesting methods, post treatments with fire, exemption of silvicultural prescriptions to create a grassland site, etc.)
Minimise cattle conflicts with other resource users and environmental	• Develop Range Use Plans that identify and address resource, conservation and

values.	environmental values. • Fencing to be constructed according to Interim Wildlife Safe Fencing Guidelines. • Apply FPC and relevant guidelines including Biodiversity, Riparian, and Wildlife habitat. • Encourage the Agri-Food sector to recognise the public interest in wildlife, biodiversity and water quality. • Involve the ranching industry and stake-holders in subsequent land use planning exercises.

4.5 Agriculture

Objectives	*Strategies*
Provide for the future growth and development of the agriculture and food industries. ***Maintain and/or enhance the agriculture industry access and use of crown resources for grazing, land, and water.***	• Support the purpose and intent of the Agricultural Land Reserve. • Maintain opportunities for Canada Land Inventory (CLI) agricultural land Classed 1-5 to be developed for agriculture and food production.
	• In a co-operative effort, BC Assets and Land Corporation (BCAL), Ministry of Agriculture and Food, Ministry of Environment, Lands and Parks and the Ministry of Forests should identify land with agricultural potential, determine and map soil capability at an appropriate scale (1:20,000), and designate suitable lands for Agricultural Development Areas (ADAs), potential ALR and FLR areas. • Initiate appropriate agriculture enhancement proposals based on the objectives developed for management zones and the Forest Practices Code. • Promote agricultural practices that will maintain desired water quality and soil productivity. • Support the Code of Agricultural Practice for Waste Management. • Support access to lease, develop and purchase Crown Land for the expansion of Agriculture through the current Land Act application and referral process.

4.6 Tourism and Recreation Targets

Under the CCLUP, targets were established for both tourism and recreation to ensure that the resource based values that are critical to both are incorporated in the integrated resource management planning process. Tourism is a resource-based industry; outdoor recreation is dependent on the same natural resources—views, lakes, trails, etc. The CCLUP direction often overlaps them both. In this context, the two are considered interwoven for the purpose of this plan, as are the directions to achieve their management targets.

4.6.1 Visual Resource Management

Background

Visual resource management is often perceived by the public as reflecting the overall level of respect and care we have for the natural environment. Scenic, natural appearing landscapes contribute to the quality of life and economy by providing natural settings for habitation, work, travel, and recreation. Visual resource management is thus a critical component of resource management activities in the ART Sub Regional Plan area, ensuring the quality of tourism and recreation experiences. Management direction for these viewsheds are detailed in both the Tourism and Recreation CCLUP sub-zonal targets. The primary focus is managing viewsheds in the context of forest management. However, visual resource management goals and objectives should also guide other types of land development including mining, utility corridors, recreation facilities, tourism development, and urban development. Forested and non-forested Crown land including grasslands, alpine areas, and wetlands are included.

Goals

- Allow for a diversity of landscape conditions and viewing opportunities and to encourage long term planning; and
- Use of harvesting and silviculture techniques in visually sensitive areas to provide certainty both in terms of maintaining viewsheds and access to natural resources for extraction purposes.

Method

The visual resource management areas for this Plan were derived from existing CCLUP direction, MOF recreation inventories, MSBTC tourism input, and public input. It is recognised that the management of some viewsheds is more critical than others, given the nature and level of use, commercial reliance, and community character. Therefore, the visual resource management areas fall into five categories:

1) Areas of high visual importance, to be managed as Visual Quality Areas;

2) Areas of moderate visual importance, referred to as Scenic Areas;

3) Areas of visual importance viewed from high elevation.

4) Road Corridors as Scenic Areas

5) Flight Corridors

4.6.1a Visual Quality Areas and Scenic Areas

Visual Quality areas: Areas with high visual importance and sensitivity and include the viewscapes from existing tourism facilities, and will be managed utilising the establishment of VQOs to provide the highest degree of certainty possible. These viewsheds are generally where people spend periods of time in one place, or where commercial success is dependent on maintained viewshed quality. Visual Quality Areas will be managed utilising the establishment of VQO's to provide the highest degree of certainty possible. It is anticipated that the areas recommended for VQO designation will be enabled at the discretion of the District Manager.

Scenic Area: Areas of moderate visual sensitivity and will be managed as Scenic Areas, including the Klinaklini River corridor, to permit increased flexibility and to encourage innovative forest management concepts and techniques. Scenic areas have more of a recreation focus, and are not directly linked to commercial viability, but contribute indirectly (i.e. travel routes, fishing lakes, etc.).

All visual resource management areas will be recommended to become Known Scenic Areas with acceptance of this Plan. It is anticipated that the areas recommended for VQO designation will be enabled at the discretion of the District Manager.

The following objectives and strategies apply to Visual Resource Management Area types 1 through 4 as described in Section 4.6.1 of the Visual Resource Management, method section.

Objectives	***Strategies***
Provide certainty for those who derive high value from visually sensitive areas and for those dependent on effective resource extraction.	It is recommended that the areas shown on Map 3, (Scenic Areas and High elevation viewpoints), be established as "known Scenic Areas" at the discretion of the District Manager; Operational planners should demonstrate how they will achieve the visual management objectives for proposed disturbance. Some of the methods available include the following, however, none of these is intended to limit the ability operational planners to implement innovative methods in achieving the intended results: • design resource extraction, silviculture, and access plans to maintain long term visual management objectives and maintain and enhance long term resource extraction;

	• apply integrated visual landscape design principles and technique when planning and implementing development activities; • encourage species diversity to allow future innovative practices to maintain the quality of viewsheds; • utilise silviculture systems that contribute to achieving a balance of resource management objectives; • integrate special management constraints required by the FPC, where appropriate, as part of the visual management design; • utilise silviculture techniques that reduce the time required to reach visually effective greenup; • design and implement silviculture treatments with the intent to minimise visual impact (i.e. mechanical site preparation, spacing, thinning, etc.);
	• design disturbances to mimic naturally occurring line, form, colour, and texture of the viewshed; • design opening size to reflect the existing scale of natural openings, vegetation patterns, and natural features; • Consider visual rehabilitation (reshape, revegetate, etc.) in previously impacted areas to encourage visually effective green up, reduce re-entry delay, and increase short term area access; • design foreground disturbance with consideration to the existing visual state of mid and background areas that may become visible as a result; • design, construct, and maintain roads to avoid creating long term visual impacts by utilising the most appropriate terrain and vegetative screening, grass seeding areas of colour contrast, and minimising landing area and road right-of-way width; and • use temporal distribution techniques when

	planning cutblocks. MOF should ensure the application of minimum visually effective green-up heights, based on site biogeoclimatic and biophysical conditions. MOF to implement smoke management plans which will minimise the need for prescribed burns during peak tourism seasons, particularly in identified Backcountry Units.
Promote proactive management of forest health concerns to minimise impact in visual management areas.	• In addressing areas of infestation (insects, mistletoe, etc.,) operational planners should use a silviculture system that meets the spirit and intent of the visual management objectives for the subject site.
Monitor visual management areas to confirm the spirit and intent of the goals and objectives are met.	• MOF should monitor the technical components of visual resource management to confirm that: • VQOs and visual management guidelines in scenic areas are being achieved; • forest practices are based on and contributing to long-term management of visually sensitive areas; and • to determine the success rate of alternative silviculture systems and visual simulations in managed stands.

For all VQO Areas consider the following objectives and strategies; (as per Map 4a):

Objectives	***Strategies***
Maintain the high scenic value of visually sensitive areas.	• SDM to consider establishing, in consultation with the Ministry of Small Business, Tourism and Culture, visual quality objectives (VQO's)for existing tourism operation viewsheds, ranging from retention to partial retention. • Licensees to indicate how any established VQOs will be met. • In exceptional cases, known scenic areas not shown on map 3 may be (e.g. very localised areas of higher significance), recommended to the District Manager to be considered for

	establishing VQOs.

4.6.1b High Elevation Visuals

Visual Resource Management from Recognised High Elevation Viewpoints, as shown on Map 3.

Background

For the purposes of the ART Sub Regional Plan, high elevation viewpoints are those located above the treeline and encompass a panoramic viewing area. The viewpoint managed include two locations in Tweedsmuir Park that are located on either side of Beeftrail Creek.

The standard visual resource management process used for valley bottom views culminates with designation as a known Scenic Area. Visual Impact Assessments (VIA) are required to satisfy VQOs, but VIAs only work well for viewpoints that look horizontally or upwards. This procedure therefore does not transfer effectively to high elevation viewpoints, and a different approach is required to ensure that due consideration is given to avoid detrimental impacts on viewsheds and experiences.

Method

The areas identified for High Elevation Visuals reflects current use areas. It is anticipated that the list of high elevation viewpoints will be supplemented over time with increased tourism and recreation use, particularly in Backcountry areas. Additions to this list will not impact on access to timber, as it is focused on using basic design principles to minimize visual impact.

Although the scenery from both high and low elevation viewpoints is similar, the qualitative and quantitative definitions of VQOs can not be applied effectively to protect visual values, and can overly constrain timber supply. Also, high elevation viewpoints encompass areas that were not visible from low elevation viewpoints.

The first step in assessing high elevation visuals is to simplify panoramic vistas into smaller, discrete, repetitive visual elements that can be visualised and manipulated in design. Then, the arrangement of landscape elements is spatially organised. Once existing patterns on the landscape are established, one can begin to develop possible changes that will be harmonious and consistent with acknowledged landscape patterns.

This plan recognises there are overlaps between the Caribou migration corridor and the high elevation viewsheds. High elevation viewshed management will be consistent with the Caribou Strategy.

The following objectives and strategies apply to, an as yet to be determined distance from the high elevation viewpoints. Where a more distant disturbance would be visibly dominant, these objectives and strategies would also apply.

Objectives	*Strategies*
Maintain a natural looking landscape with minimal geometric disturbances.	• Design disturbances to have organic shapes and mimic the pattern of natural openings in the area (e.g. lakes, rock outcrops, meadows, and fire history). The shapes should be asymmetrical, interlocking, organic, and have varying size consistent with the naturally occurring patch size distribution for the area. Avoid repetition and similarity. • Apply visual landscape design to main haul road rights-of-way, recreation corridors, and riparian management zones which are visible from high elevation viewpoints. Avoid creating a straight-edged, narrow, ribbon effect. • In areas that overlap with the Caribou migration corridor, develop landscape design solutions that will manage for both Caribou and High Elevation visuals. Possible solutions include narrow blocks orientated to benefit caribou migration while being screened from the high elevation viewpoint.

4.6.1c Road Corridors

Method

Highway 20 is identified in the CCLUP as a scenic corridor. A 200 m modified harvest zone either side of the road is recommended to facilitate effective management necessary to mitigate visual impact of human disturbances within the immediate corridor. This zone is subject to the implementation of visual landscape design principles, which will not have an impact to access to timber. It is anticipated that additional roads may require

corridor management to reflect increased tourism, recreation and residential use. Additional road corridors managed for visuals should not impact access to timber, as this management is focused on basic design principles to minimize visual impact.

Objectives	*Strategies*
Maintain a natural looking landscape with minimal geometric disturbances.	• Design disturbances to have organic shapes and mimic the pattern of natural openings in the area (e.g. lakes, rock outcrops, meadows, and fire history). The shapes should be asymmetrical, interlocking, organic, and have varying size consistent with the naturally occurring patch size distribution for the area. Avoid repetition and similarity. • Apply visual landscape design to main haul road rights-of-way, recreation corridors, and riparian management zones which are visible from identified roads. Avoid creating a straight-edged, narrow, ribbon effect.

4.6.1d Flight Corridors (Map 4b)

Flight corridors have been identified by the ART community as areas requiring special management. This area is subject to the implementation of visual landscape design principles, which will not impact on access to timber. This area is not included in the areas recommended for Scenic Area designation.

Objectives	*Strategies*
Maintain a natural looking landscape with minimal geometric disturbances.	• Design disturbances to have organic shapes and mimic the pattern of natural openings in the area (e.g. lakes, rock outcrops, meadows, and fire history). The shapes should be asymmetrical, interlocking, organic, and have varying size consistent with the naturally occurring patch size distribution for the area. Avoid repetition and similarity.

4.6.2 Backcountry

Backcountry Areas, (Map 5)

Background

Targets were established through the CCLUP to provide backcountry areas that will be managed to be in as natural a state as possible, thereby providing opportunities for a diverse variety of public and commercial outdoor recreation activities dependent on a natural environment. Backcountry Units are defined as providing a combination of semi-primitive motorised, semi-primitive non-motorised, and primitive recreation experiences, as detailed in the MOF's Recreation Opportunity Spectrum (ROS). They are focused on relatively undisturbed viewscapes, watercourses, lakes, and recreation features. However, the Government Clarification of Key Components of the CCLUP (Sept. 27, 1996) confirms that harvesting will occur over time in these areas. Backcountry Unit characteristics must therefore be seen as dynamic. Development activities will have a certain level of impact on the experience of the recreationalist. It is expected that the recreation values will be considered during the operational planning phase. Consideration may include relocation of identified trails, (See Map 6 and the Trail Management section, 4.6.3), timing of harvesting to avoid peak use periods, controls on access, etc.

Backcountry recreation is not restricted to the areas identified. However, new commercial recreation operations are encouraged to locate within established Backcountry Units, to benefit from the certainty that the strategic management direction this Plan provides. Operators in Backcountry Units adjacent to Protected Areas should not assume that permits to operate in the parks will be given. BC Parks may have restrictions on types and levels of use. Operational planners and resource managers must be sensitive to evolving recreation activities in the backcountry. The list of existing Backcountry Unit focuses is not exhaustive and these focuses are expected to alter with time.

Goals

- Provide opportunities for a diverse variety of public and commercial outdoor recreation activities that are dependent on the values of the natural environment;
- Manage Backcountry Units utilising management techniques compatible with other overlapping non-timber constraints; and
- Direct recreation activities to areas where they are compatible with other non-timber management objectives.

Method

The methods used to identify Backcountry Units and associated management directions are based on recognition that management of these areas cannot impact on access to timber, and thus must look to overlapping with other non-timber constraints. Therefore, the recreation activities must be flexible and able to be as dynamic as the management regimes necessitate.

Backcountry Units were delineated by mapping areas of significant overlap of recreation/tourism values and other non-timber values. Overlaps include areas constrained by the CCLUP and/or the Forest Practices Code. Examples of constraints include areas such as reservation areas, visual resource management areas, caribou habitat, and Old Growth Management Areas (OGMA). The methods used to manage for these values will also be used to manage the overlapping Backcountry Units.

Once the Backcountry Units were identified, access management guidelines were incorporated and management direction for future harvesting, and recreational access planning was defined for each unit, (Appendix IV). This direction reflects the types of recreation activities and focus features, and how backcountry conditions can be maintained over time as resource extraction proceeds. This direction should apply to all forms of resource extraction, as it does not prohibit extraction except where the overlapping constraints dictate.

In all zones, the CCLUP backcountry targets have been met. In some zones, the total area identified for backcountry exceeds the targets. The intent is to provide as much area for public and commercial recreation as possible, while not creating any impact on access to timber. The plan acknowledges that over time harvesting will occur, and may impact the quality of the backcountry conditions for a period of time. Where practical, backcountry recreation will be directed to other locations within the mapped areas.

Objectives	***Strategies***
Maintain or enhance backcountry conditions within identified areas.	• Where backcountry activities are tied to a specific feature, such as a hiking trail around a lake, the design tools and management techniques used to manage overlapping non-timber constraints (wildlife, visuals, biodiversity, etc.) should be used to maintain the integrity of the experience. • Where backcountry activities are not tied to a specific feature, and where the natural values associated with a given recreation activity cannot be maintained as harvesting proceeds, users should be directed to adjacent areas within the Backcountry Unit which provide similar recreation conditions. • Any development activity within Backcountry Units should be done with as much consultation with identified user group as possible. • To facilitate dispute resolution, ART signatories and/or regulatory agencies agree to endeavour to use, as an initial step, prior to regulatory or legislative remedies, a

	proactive, consensus based approach to resolving conflicts and challenges around backcountry issues.
	Operational planners should: • identify how backcountry values will be maintained, and incorporate the harvesting direction through design work or other innovative techniques to achieve the desired result; • Plan blocks within Backcountry Units to encourage species diversity and allow future alternative silviculture practices that will facilitate maintenance of backcountry conditions; • Undertake industrial activities (road construction, harvesting, slash burning, etc.) during the off peak periods for backcountry use; and • Apply temporal distribution of cutblocks when applicable.
Access planning within each Backcountry Unit should assist in maintaining backcountry conditions.	• Backcountry access management shall be consistent with the Access Management Strategies developed for this plan.
Ensure access management planning maintains appropriate access for commercial tourism operations.	• Operational planners should involve MOF, MELP, BCAL, MSBTC and backcountry tourism operators at the onset of operational access planning, including road deactivation projects, where existing tourism operations may be impacted.
Recreation activities must be compatible with environmental sensitivities and other recreation activities.	• Future recreation management within each Backcountry Unit should be consistent with the direction provided by unit. • MOF, MELP, BCAL, and MSBTC should direct recreation activities that are not compatible with known environmental sensitivities to more appropriate Backcountry Units. Incompatible activities will be identified through the existing referral process. • MOF should integrate the management of known recreation features, settings and

	facilities with the requirements of other uses within the Backcountry Unit. • Recreation planning should include consultation with the appropriate MELP staff to avoid conflicts with overlapping environmental constraints, such as caribou habitat, Mule deer winter ranges, (MDWR), etc. • MOF, MELP, BCAL, and MSBTC should work together to establish and maintain a comprehensive updated recreation inventory.

4.6.3 Trail Management

More detailed direction for trail management within a specific area is included in Appendix IV, Backcountry Management Direction.

Trails have played a significant role in the settlement and development of the ART area. They continue to play an important role in providing both private and commercial opportunities for recreation. As such, trails management is considered an important element of this Plan. Trails identified for management within this plan were derived from MOF inventories and supplemented by local information. The inventory of trails is not exhaustive and will be added to over time. See Map 6 for Trails Identified at the time of this plan.

While specific trail buffers have not been identified, inventoried trails have been analysed using an average no harvest buffer of 30 meters plus an additional 20-meter modified harvest buffer. For some trails or sections of trails the integrity of the trail will be maintained by removing debris and or leaving 3 to 5 metre blazed stubs. Trails will receive a reserve zone depending on the significance of the trail. Significant trails, identified through the Landscape Unit planning or identified during FDP reviews will receive reserves necessary to mitigate the impacts of timber harvesting from the trail based experience.

Trail management is not limited to the use of reserve and modified areas. For additional methods of trail management, see Section, 4.6.2 on Backcountry.

4.7 Lakes Management

Two categories of targets, dealing with management of lakes and their respective management zones in the ART SRP area are referenced in the CCLUP: key lakes and quality lakes. The CCLUP is unclear in developing on these two types of lakes. To aid in understanding and addressing these targets a consensus based ART Lakes Classification Sub Committee was formed that included Agency and ART members. The

Sub Committee attempted to recommend management for all lakes within the Plan area greater than 5 hectares. The Sub Committee used a lake classification system that incorporated an approach developed in the ART Consensus document. Specific lake classifications can be found in Appendix V. This appendix is only a summary of the management agreements reached by the ART Lakes Classification Sub Committee. See Map 7.

4.7.1 Key Lakes

(Recreation target)

Goals

- Manage the visual quality around designated Key lakes.

Objectives	*Strategies*
Manage the visuals in the lakeshore management zone as directed by its classification.	• Refer to the Visual Resource Management section, 4.6.1, for strategies directing activities in the lakeshore management zone.

Method

Key Lakes have been interpreted to include all lakes with a lakeshore management prescription that maintains visual quality. It is assumed that the average VQO for a viewshed being managed for visual quality is Partial Retention. All lakes recommended by the ART lakes classification table as Quality Wilderness Lakes (Quality A), General A and General B lakes meet this definition and are assessed for the terms of this plan as Key Lakes. A total of 68 lakes in the plan area are considered key lakes.

4.7.2 Quality Lakes for Wilderness Fisheries

(Fish & Wildlife Target)

Goals

- Ensure the quality and integrity of visual resources are managed around Quality Wilderness lakes and the surrounding areas are maintained in a backcountry condition. Strategies and Objectives for addressing the targets are discussed in the Visual Resource Management section, (4.6.1), the Backcountry section, (4.6.2), and the Key Lakes section, (4.7.1).

Method

The ART Lakes Classification Sub Committee has recommended the designation of all classified Quality A lakes as Quality Lakes for Wilderness Fisheries. A total of 5 lakes in the plan area are considered Quality Lakes for Wilderness Fisheries. Targets for Quality Lakes for Wilderness Fisheries set out in the CCLUP are: Charlotte Alplands SRDZ - 15 lakes (1 recommended); Itchas Ilgachuz SRDZ - 3 lakes (3 recommended); Anahim Lake IRMZ - 2 lakes (1 recommended); Kleena Kleene IRMZ – 2 lakes (0 recommended).

The remaining Quality lakes for Wilderness Fisheries not specifically named in the Charlotte Alplands SRDZ are recommended to be located in the Charlotte Alplands CASC to maximise overlap of constrained areas. Further work is required through Landscape Unit planning, possibly through the Landscape Unit Planning Sub Committee, (LUPSC) and the ART Lakes Sub Committee in consultation with BCAL, to specifically identify all Quality Lakes for Wilderness Fisheries in the plan area.

Timber Access Implications of Lakes Classification

In the lakes classification process, the size of the lakeshore management zone (LMZ) has the main impact on timber availability. The width of the LMZ can vary greatly to allow for visual management and protecting the lakeshore reserve zone. In areas where the topography is flat a very narrow LMZ is sufficient, but in sloping topography a wide LMZ is needed. The amount of timber that can be removed from the management zone also varies.

4.8 Wildcraft

Objectives	*Strategies*
Maintain or enhance the wildcraft resource at or from its present level of use.	• MOF and MELP to conduct an Inventory to define and assess the status of wildcraft resources and products. • Identify sites and conditions that promote and enhance growth of matusutake, (Tricholoma magnivelare), pine mushrooms. • Identify all information gaps around volume harvested, the time of year when harvesting occurs, the number of harvesters, as well as the value and or grade of pine mushrooms harvested.

	• Consider all existing studies and Workshops relevant to Pine Mushrooms pertinent to the area. This will include the following documents; **1)** Ecological Description and classification of some Pine Mushroom (Tricholoma magnivelare) Habitat in British Columbia, draft January 2000, S, M. Berch and A.M. Wiensczyk, **2)** Wild Mushroom Harvesting Discussion Session Minutes, March 3, 1992, Pacific Forest Centre Victoria B.C. **3)** Workshop results of the Pine Mushroom Task Force, April 1994. • MOF and MELP to maintain key mushroom sites in a condition that promotes mushroom growth for the achievement of the CCLUP targets. • Inventory and monitor the effects of timber harvesting on pine mushrooms to guide future interaction between these two resources. • Gather economic information, such as gross receipts, spin off effects and potential value added qualities of the pine mushroom industry. • In consultation with the Ulkatcho Band and resource users, MOF and MELP should design a harvesting of mushrooms framework to protect the resource. Examples of the framework to consider are outlined in the pine mushroom task force workshop 1994.
Manage the proportion of the polygons that will be available for wildcraft harvesting through road access versus walk-in.	• MOF and MELP to determine specific RMZ roaded access targets guiding activities in different areas. • MOF to maintain the 1994 (date of CCLUP) level of roaded access in each polygon, unless it is necessary to restrict access to protect other values. Roads can be deactivated as long as the percentage of roaded area within the polygon continues to meet the zonal target. • Include Wildcraft representation in any future access management planning.

4.9 Timber

Timber access at the Sub Regional Planning level is area based and is defined within the productive forest land base as described on page 151 of the 90 day Report. It is to be measured over the long term, (50 to 200 years) and uses CCLUP targets as directed by the Integration Report. It is not a volume based timber supply allocation.

The Caribou Chilcotin Land Use Plan has, through target allocation ensured that the Cariboo Region will retain a healthy, sustainable forest industry into the foreseeable future. The intent is to provide an opportunity for timber production in each resource management zone over the long term while accommodating other resource values. The overall CCLUP timber targets have balanced throughout the ART SRP area with some redistribution in the required timber target percentages per sub unit.

The option presented within this report requires a reduction in the area available for timber access of approximately 15,000 hectares in the Charlotte Alplands SRDZ. This redistribution of timber access is the result of the Community Area of Special Concern, (CASC), recommended to be placed in the Charlotte Alplands SRDZ, see map 1. This implies no commercial harvesting operations take place in these CASC's. It is understood that the SDM still has authority under the Ministry of Forests Act Sec 4b) to manage protect and conserve the forest resource in the short and long term. This could require the cutting of trees for fire control under the Timber Harvesting Practices Regulation or as required for emergency forest health control in the event of severe natural disturbances. This recommendation is balanced with an equivalent increase in the number of hectares available for timber access, in the Anahim Lake IRMZ, the Kleena Kleene IRMZ and the Itchas Ilgatchuz SRDZ.

Goal

- Establish areas of timber availability throughout the Sub Regional Plan area in consideration of other resource values and established targets.

Implications to Timber Targets with the Enhanced Biodiversity Emphasis Scenario

The enhanced Biodiversity Emphasis Scenario as presented in this report (section 4.10.2b) will require additional hectares to be managed for both mature and old targets. The enhanced old impact was netted down from a total of 4421 hectares to 995 hectares. This 995 hectares was required outside of constrained areas, to meet the enhanced old targets once the overlap with all constraints was maximised. The net down of the mature hectares required, to meet targets outside of constrained areas, with the enhanced option, still has to be determined. If new information becomes available that indicates impacts to timber are inconsistent with the Higher Level Plan targets and strategies the scenario may be revisited consistent with the intent of the Objectives and Strategies of the ART SRP. See section 4.10.2b) on Seral Stage Distribution.

The timber impact of managing for the mature portion of the mature plus old seral requirement requires a .2 or 20% EEA in pine stands. This is a result of extending the rotation from 80 to 100 years to accommodate the assumed mature age of pine to be 100 years. This is variable because it is based on the relative amounts and types of other modified harvest areas in the LU/BEC unit.

Objectives	*Strategies*
Achieve the approved Timber access targets as determined within the ART SRP area.	• All Agencies to continue to maximise the overlap of established constraints in a way that maximises timber accessibility as well as other valuable resource targets. • MOF with input from Licencees should develop a monitoring process to track timber harvesting and future timber availability. This should be available in ArcInfo format to allow for the monitoring of the consistency of the information with the overall CCLUP targets. The process should be developed in a Regionally consistent manner. • MOF and Licencees to develop management options for each RMZ as directed by the integration report. • MOF to analytically determine longterm sustainable even flow for timber access, which would include analysing timber supply for improvement in age class structure for long term planning.
	• MOF, MELP and Licencees to provide input into the Forest Renewal of British Columbia, Resource Management Plan process. In particular the Strengthening Sustainable Forest Management Report. • MOF and MELP to complete Landscape Unit Planning by moving forward with the develoment of LU objectives and strategies.
Maximize timber enhancement activities.	• MOF with input from Licencees should provide landbased information for the Development of Timber enhancement targets to Timber Enhancement Sub Committee (TESC). • This would include Licensees providing input on potential, and not limited to, enhancement activities such as; reduction of timing to green up, site rehabilitation, reducing regeneration delay, fill planting and or increasing minimum stocking standard to maximise site occupancy, elimination of all backlog areas, and an increase effort in the management of shade tolerant species.

	• The TESC is tasked with developing a timber enhancement strategy. This standing committee will pursue ways to maximise the productivity of the forest. The committee will identify potential ways to enhance timber production and value by taking into consideration the landbase, better information, growth and yield and timber availability and utilization. This would include gathering input on harvesting practices as well as looking at ways of maximising the productive forest landbase through progress on Marginal Forest types and reclamation of unproductive areas. • Develop and implement innovative harvest and silviculture techniques to help minimise epidemic populations of Mountain Pine Beetle. • Prevent the diminishment of the productive forest landbase that can occur through mismanagement or site degradation.

The Integration Report, Long term analysis, assumes over the long term, with the application of the non-timber and timber targets, that the forested landscape is at age class equilibrium. For long term planning in the Integration report, current seral stage forest inventory information was not considered.

Goal

- Maintain wood supply in the short term and move to a longterm sustainable strategy. The integration report indicated that the proposed Short Term Timber Availability Analysis, (STTAA), option could be well integrated with long term CCLUP targets, including Biodiversity targets as directed by the Biodiversity Conservation Strategy and only a few Landscape Units within the Region would have any constraint on Timber Access in the short term.

Objectives	*Strategies*
Have a transition plan for wood supply from the short term to one that is sustainable in the long term.	• MOF and Licencees should continue to identify and monitor areas where non-timber resource values are important and timber supply could be impacted. • MOF and Licencees should further investigate how SRP constraints will affect the short-term test of the STTAA to the long-term analysis

	for residual area available for timber access. • MOF with Input from Licencees should complete analysis around the mature availability in the short term and manage for mature by maximising overlap with other constraints. • MOF and Licencees should analyse how the residual long term availability is affected by merchantability, adjacency and operability. • Licencees should use modified harvest regimes that will allow for timber removal while protecting the other resource values where appropriate. • MOF and Licencees should utilise cutblock size, 20 year forest development planning, and the use of maximizing overlap of OGMA's on constrained areas to minimize short term timber impacts in consultation with the ART and MELP.
	• Proceed in the Caribou areas in a consistent manner with the most recent strategies as presented by the Caribou strategy committee. The Caribou Committee is expected to update the strategy for the western Itchas Ilgatchuz herd by the summer of 2001. • Use target adjustments in the short term where wood supply is impacted. • MOF will periodically undertake a spatial analysis to determine the contribution of modified harvest, constrained areas and no harvest areas to the mature seral requirement. If through this analysis concerns arise around mature availability, the issue of managing for mature will be revisited.

4.10 Biodiversity, Wildlife and Fisheries Conservation

Introduction

This section outlines the measures that are provided by this recommended scenario for conserving biodiversity and wildlife fish habitat. In the context of a Sub-Regional Plan, the main purposes of these measures can be summarized as being:

- to spatially implement the biodiversity and fish and wildlife provisions of the CCLUP Higher Level Plan, and demonstrate how CCLUP targets and strategies have been addressed
- to provide clear direction for subsequent establishment of landscape unit objectives

Since the biodiversity and fish/wildlife measures will form a major portion of the SRP elements that will be examined for conversion to legal measures, they are outlined in a format intended to facilitate their establishment as landscape unit objectives and strategies. In other words, where "objectives" and "strategies" are presented in the text, they are intended to be considered as "draft landscape unit objectives and strategies" to the extent appropriate for a sub regional plan.

In addition, this section and referenced appendices will document the linkages between the measures in this SRP scenario and those in:

- 1994 ART Consensus Document
- 1995 CCLUP and 1998 Integration Report
- 1999/2000 current policies for
    - Landscape Unit Planning for conserving biodiversity
    - Identified Wildlife Management Strategy for conserving habitat for species at risk including regionally important wildlife

The emphasis of this section will be on how this scenario provides direction for the future. Details of the path followed by the ART over the past 10 years is provided to the extent required to document how the direction for the future was developed.

Background

The ART Consensus Document (1994) contained numerous measures for protecting fish and wildlife habitat and biodiversity. These measures were mainly in the format of goals and non-quantified resource objectives, and included some geographically specific direction regarding implementation. They were interpreted for more spatially explicit definition in the base case scenario for this SRP in the following package of measures:

- 30 meters no harvest (NH) on all streams and wetlands to protect riparian habitat and connectivity
- larger NH reserves (mainly 200 meters) around important stream/river riparian corridors and wetland complexes to protect a range of fish and wildlife habitat values as well as landscape level biodiversity and connectivity values (guidance for location of these larger NH areas taken from geographic references in the ART document supplemented by riparian/old growth mapping)
- NH all pure and leading spruce forest types (i.e. over 50% spruce as typed on the forest cover maps) to protect the high habitat and biodiversity values of these areas, especially for furbearers (protection of habitat/biodiversity values of old growth pine forest types were included in the riparian and larger reserves noted above)
- modified harvest (MH) all non-leading spruce stands (i.e. 20 - 50% spruce) and all major Douglas fir forests (over 20% fir) to protect high habitat and biodiversity values

It was agreed in the SRP Terms of Reference that the above package was only one of other possible interpretations of the ART Consensus Document (1994). It has been completely revised in this recommended SRP scenario to address the very high timber supply impacts of the Base Case Scenario, as well as to incorporate the policies that are now available for conserving biodiversity and habitat under the Forest Practices Code. These policies are outlined in the Landscape Unit Planning Guide (LUPG, released March 1999) and the Identified Wildlife Management Strategy (IWMS, released April 1999). They involve distributing biodiversity and habitat retention across the landscape according to a systematic framework based on ecosystem and critical habitat representation, and include legal establishment of both Old Growth Management Areas (OGMA's) large enough to provide interior forest conditions, and Wildlife Habitat Areas or equivalent wildlife measures. The Biodiversity Guidebook (BGB) released in September 1995 remains an important additional policy reference.

Despite being superseded by more recent policy and legislation, the ART Consensus Document (1994) is acknowledged in the CCLUP as:

"a foundational cross-sectoral accord for resource targets and development planning within its planning area boundaries. It has served as a guide in the development of the resource targets for the Land Use Plan and, to the greatest feasible extent, these targets are consistent with that Agreement."

The biodiversity and habitat measures of the ART Consensus Document (1994) are summarized in Appendix VI, and are also cross-referenced in Appendix VII with corresponding provisions of the current legal and policy framework for biodiversity and habitat.

Goals

Biological diversity (= "biodiversity") is defined in the Biodiversity Guidebook (BGB) as:

The diversity of plants, animals and other living organisms in all their forms and levels of organisms, and includes the diversity of genes, species and ecosystems, as well as the evolutionary and functional processes that link them.

Developing a biodiversity conservation strategy that is based on a variety of management strategies for individual species is neither feasible nor effective (BGB). The impact of forest management practices on many species is unknown and certain practices that benefit some species are often detrimental to others. What is recommended by the current policy framework is an ecosystem management approach that provides suitable habitat conditions for all native species. In this way, habitat diversity is used as a surrogate to maintain biodiversity. Strategies for implementing this landscape biodiversity approach are provided under the Landscape Unit Planning provisions of the Forest Practices Code.

At the same time however, additional measures may be needed to protect the habitat of species that are known to be at risk, such as threatened, endangered or regionally

important species. Specific strategies for addressing these species are provided under the Identified Wildlife Management Strategy of the Forest Practices Code.

Accordingly, this section outlines for this SRP the elements of an ecosystem management approach for conserving biodiversity and fish and wildlife habitat, in the following order:

- landscape level biodiversity measures
- stand level biodiversity measures
- additional measures to address habitat requirements for species at risk including:
  - endangered and threatened species (red and blue-listed)
  - regionally important species (populations at risk due to forest or range practices)
  - other species or plant communities important to the ART (e.g. pine mushroom sites)

Based on consideration of the ART Consensus Document (1994), as well as the Biodiversity Guidebook, the Landscape Unit Planning Guide and the Identified Wildlife Management Strategy, this SRP recommends the following;

Biodiversity and Habitat Goals

- Using an ecosystem management approach that is applied at both the forest landscape and stand levels, protect and maintain ecosystem integrity and functions across the landscape, including suitable habitat conditions for all native species.
- Assist maintenance of all native species and ecological processes by designing managed forests to resemble those forests created by the activities of natural disturbance agents such as fire, wind, insects, and disease.
- Using an ecosystem management approach for both natural and managed forests, maintain in perpetuity healthy populations for all native species across their historic ranges.

4.10.1 CCLUP Legal and Policy Framework for Biodiversity, Wildlife and Fisheries Conservation

The CCLUP was declared to be a higher level plan under the FPC on Jan. 23/96, including *"the provisions regarding zones, objectives, targets and strategies where they are applicable to operational plans."* The function of this SRP is to address and spatially implement the legally declared CCLUP targets and strategies in a way that provides clear direction for subsequent Landscape Unit Planning. To understand what this means, it is very important to understand what the "CCLUP targets and strategies" are. The following excerpts from the CCLUP are provided to assist understanding of the targets and strategies both in general and specific to Biodiversity and Fish and Wildlife.

Targets

- *The concept of resource targets, particularly at the regional scale, is comparatively new [Feb./95], and is based on the need to provide land base and access certainty and sustainability for the various sectors; they are quantified, achievable commitments for resource accessibility and sustainability*

- *The targets will guide subsequent levels of sub-regional and sectoral land use planning; since there is overlap between sectoral targets, detailed sub-regional and sectoral planning is needed to resolve resource conflicts, and the targets provide an essential framework and direction for such planning.*
- *for consistency and comparability, the targets are usually expressed in terms of land area availability*
- *area specific objectives are provided for recreation, tourism, fish and wildlife*

Strategies

- *in addition to resource targets, a strategy statement is presented for each resource sector: sectoral-specific statements of the management issues, objectives and actions necessary to achieve the targets and support ongoing implementation of the CCLUP*
- *the targets and strategies are fully presented in the Appendices 3 & 4 of the CCLUP 90 Day document*

Fish, Wildlife, Biodiversity and Water

Targets are expressed in terms of land use area habitat requirements to support known populations; highlights include:

- *Maintaining riparian habitat quality for identified salmon-rearing watersheds*
- *Applying the Forest Practices Code, including riparian buffers, biodiversity conservation targets and wildlife habitat areas, across all zones. The development and implementation of a biodiversity conservation strategy for the region is a key requirement.*
- *Maintaining habitat requirements for key regional species, including white pelicans, moose, caribou, mule deer, furbearers and Dolly Varden trout*
- *Maintaining quality lake and stream fisheries through road access restrictions and visual quality management*
- *Maintaining environmental and backcountry values through improved access management*
- *Developing a comprehensive water management strategy which focuses on both water quality and quantity concerns*

Appendix VII, provides a detailed summary of the declared CCLUP provisions that address biodiversity and fish and wildlife habitat requirements (first column), along with the corresponding legal measures to implement them in the second column. The third column contains the corresponding measures from the ART Consensus Document (1994).

The CCLUP Integration Report dated April 6, 1998 was adopted June 22, 1999 as official government policy to guide all government staff in their application and interpretation of the CCLUP. It provides important direction to sub-regional planning and subsequent landscape unit planning on integrating timber and non-timber values in achieving CCLUP targets and strategies. It is important to note however that the Integration Report did not address the delivery of the following CCLUP targets:

- Mining exploration and mineral development
- Maintenance of backcountry recreation opportunities
- Maintaining habitat requirements for key regional species, including white pelicans, moose, furbearers and dolly varden trout [bull trout]
- Grassland habitats

- Wetlands
- Access management; including off-road vehicles (ex. Snowmobiles and ATV's)
- Watershed management
- Fisheries values, including lakes management
- Grazing/agriculture
- Wildcraft/agro-forestry

The above list contains numerous elements that are critical to biodiversity and fish and wildlife habitat, as well as being CCLUP target requirements, and this SRP includes recommended objectives and strategies to address them.

4.10.2 Biodiversity at the Landscape Level

4.10.2a Landscape Unit Boundaries

Draft Landscape Unit boundaries were established for the ART area by the Biodiversity Conservation Strategy at 1:250,000 scale, and have been refined for Chilcotin Forest District at the 1:30,000 scale. A final set of revisions is currently being completed based on the most up to date information. The analysis used 1998 lines, Map 8a. The lines have been updated in the year 2000 and it is the updated lines that are shown on Map 8b.

Objectives	*Strategies*
Recommend for establishment Landscape Unit boundaries as shown on Map 8b.	• Ministry of Forests and MELP will jointly sign off the final Landscape Unit boundaries, which will be legally established by the MOF District Manager.

4.10.2b Seral Stage Distribution

Consistent with CCLUP requirements and Integration direction, both mature plus old and old seral targets will be applied. The recommended scenario does not include any low biodiversity emphasis units, (see Table 1 and associated text), thus old seral targets will not be subject to draw-downs.

In addition, early seral targets are an important component of managing for landscape biodiversity. Since the mature portion of the mature plus old seral target is not spatially fixed over time, it is subject to natural disturbance such as insects, fire and disease, and requires recruitment from mid-seral forest to be maintained. Similarly, if early seral is not maintained within certain levels, future deficits in mid-seral and in turn mature seral classes will be created. The early seral targets are generally consistent with conventional multi-pass forestry, but to ensure timber supply impacts are avoided consistent with government policy, the strategy for the early seral objectives, as outlined below, is as an information tool for implementing the mature plus old seral targets.

It should be noted that the old, mature plus old and early seral targets outlined in Table 1, even with intermediate and high biodiversity emphasis only, represent a certain element of risk to biodiversity. Old and mature targets are 50% of natural levels in intermediate BEO, and 75% of natural levels in high BEO. Similarly, the early seral targets are 2 times natural levels in intermediate BEO, and 1.5 times natural levels in high BEO. The Biodiversity Guidebook notes that:

> *"It is unclear to what extent management can deviate from natural seral stage distributions without losing elements of biodiversity."*

Careful maintenance of the seral stage distributions recommended by this SRP, including the use of early seral targets as an information tool, provides the best balance the between environmental, social and economic issues associated with biodiversity conservation.

Objectives	***Strategies***
Maintain, over time, the seral condition of forests in each BEC portion of each Landscape Unit according to the distribution of percentages of the productive forest land base outlined in Table 1, with forest seral stages as defined by NDT/BEC according to Table 2.	• Consistent with CCLUP requirements, both mature plus old and old seral targets will be applied by MOF/MELP as operational requirements. The recommended scenario does not include any low biodiversity emphasis units thus old seral targets will not be subject to draw-downs • Early seral targets will be monitored operationally by MOF/MELP as an information tool for ensuring sufficient recruitment over time of mature seral forest to meet future mature plus old seral targets • The seral stage distribution of the forest within all Landscape/BEC units will be updated annually as part of the Forest District Consolidated Forest Development Mapping process. • Harvesting should not occur within a Landscape/BEC unit during periods when the seral objectives are not met.

	• Seral objectives must be met within LU/BEC units for units > 5000 hectares, and within the smaller designated valley bottom units listed in Table 3. For other NDT-BEC units < 5000 hectares, seral objectives may be met across a broader area, if this allows better implementation of biodiversity values, by lumping with the most similar adjacent NDT-BEC type.

Table 1. Seral Stage Distribution Objectives (% of productive forest landbase)

Landscape Unit	BEO Column B	NDT 2			NDT 3						NDT 4					
		ESSFxv1 ESSFmw ESSFmc			SBPSxc SBPSmc			MSxv MSdc2			IDFdk4 pine IDFdw pine IDFunv pine IDFww pine			IDFdk4 fir IDFdw fir IDFunv fir IDFww fir		
		E	M+O	O	E	M+O	O	E	M+O	O	E	M+O	O	E	M+O	O
Alplands	**High**	<27	>42	>13	<50	>25	>10	<35	>39	>21						
Atnarko	**High**	<27	>42	>13	<50	>25	>10	<35	>39	>21	<40	>34	>16	<9	>65	>32
Beeftrail/Far	High	<27	>42	>13	<50	>25	>10	<35	>39	>21						
Big Stick	**Intermediate**	<36	>28	>9	<66	>17	>7	<46	>26	>14	<54	>23	>11	<12	>43	>21
Christensen	Intermediate	<36	>28	>9	<66	>17	>7	<46	>26	>14						
Clearwater	**Intermediate**	<36	>28	>9	<66	>17	>7	<46	>26	>14	<54	>23	>11	<12	>43	>21
Colwell	**Intermediate**	<36	>28	>9				<46	>26	>14	<54	>23	>11	<12	>43	>21
Corkscrew	High	<27	>42	>13	<50	>25	>10	<35	>39	>21						
Holtry	Intermediate	<36	>28	>9	<66	>17	>7	<46	>26	>14						
Hotnarko	**High**	<27	>42	>13	<50	>25	>10	<35	>39	>21	<40	>34	>16	<9	>65	>32
Klinaklini	Intermediate	<36	>28	>9	<66	>17	>7	<46	>26	>14	<54	>23	>11	<12	>43	>21
McClinchy	Intermediate	<36	>28	>9	<66	>17	>7	<46	>26	>14						
Nimpo	**Intermediate**				<66	>17	>7	<46	>26	>14						
Telegraph	High	<27	>42	>13	<50	>25	>10	<35	>39	>21	<40	>34	>16	<9	>65	>32

Tusulko	High	<27	>42	>13	<50	>25	>10	<35	>39	>21						
Upper Dean	Intermediate	<36	>28	>9	<66	>17	>7	<46	>26	>14						

Table 2. Seral Stage Definitions

NDT	BEC Zone	Early Seral (forest stand age in years)	Mature Seral (forest stand age in years)	Old Seral (forest stand age in years)
2	ESSF	<40	>120	>250
3	SBPS	<40	>100	>140
3	MS	<40	>100	>140
4	IDF fir	<40	>100	>250
4	IDF pine	<40	>100	>140

Table 3. Designated Valley-Bottom Landscape/BEC Units in ART SRP Area

Landscape Unit	Valley-Bottom BEC Unit
Clearwater	IDFdk4
Colwell	MSdc2

Biodiversity Emphasis

The BEO's in bold text in column B of Table 1, have been enhanced from the scenario outlined in the CCLUP Integration Report. See Map 8a. These enhanced levels are an element of the SRP scenario proposed by the community, and the incremental increases in old seral targets were assessed for long term impacts to timber with the results summarized in Table 4. The total increase in old seral targets was 4421 ha, of which 3426 ha or 77% is overlapped with other constraints. The incremental increase in long term old seral requirements of 995 ha across the SRP area is summarized below.

Table 4. Incremental increases* in Old Seral Targets With Enhanced BEO

Landscape Unit	BEO Change	Increase* in long term old seral required (ha)
Alplands	Intermediate to high	0
Atnarko	Intermediate to high	0
Big Stick	Low to intermediate	0
Clearwater	Low to intermediate	0
Colwell	Low to intermediate	0
Hotnarko	Intermediate to high	MS – 298 IDF fir – 62
Nimpo	Low to intermediate	0
Tusulko	Intermediate to high	MS – 635

Total increase in long term old required		**995 ha**
% of ART total productive forest 417,881 ha		**0.24 %**

* incremental increases = increases in addition to those overlapped with other equivalent constrained area

See Map 8a for BEO and Landscape Unit lines for this scenario.

The incremental increase in long term old seral requirements (995 ha) is relatively small due to a combination of:

- BEO from low to intermediate: does not increase old seral requirements
- BEO from intermediate to high - in 20 of the 23 of the affected BEC units, the increase in old seral requirements was less than the amount that old seral requirements were already overachieved in the Integration scenario.

The long term timber impacts of managing for the mature portion of the mature plus old seral requirement, including the incremental impacts associated with the increased mature plus old requirements of this enhanced BEO scenario, were not assessed. Other Cariboo Region SRP's to date have also been unable to fully address the complete mature issue.

While old seral requirements will be met through OGMA planning, the mature component of seral requirements should be met through maximising overlaps with the following:

- Caribou management
- riparian management
- visually sensitive areas, including partial retention as well as retention VQO area
- other modified harvest prescriptions, and
- over achievement of old targets by no harvest areas

For this SRP, the incremental timber impacts of the increased mature plus old will be mitigated by overlapping constraints as well as with the 20% EEA factor.

It is acknowledged that more work is required to fully address the issue of meeting mature plus old seral targets. This SRP recommends that MOF and MELP develop and implement a monitoring strategy to track both the long and short term timber access and availability with respect to the other SRP components (see Section 4.9 Timber). If new information becomes available that indicates impacts to timber are inconsistent with the Higher Level Plan targets and strategies the scenario may be revisited consistent with the intent of the objectives and strategies of the ART SRP.

Based on the information available at this time, the Interagency Planning Team recommends this enhanced BEO scenario for acceptance and endorsement by RRB and IAMC, subject to the required consistency with timber access targets.

4.10.2c Old Seral Forest Retention and Representativeness

The hectares of Long Term and Transition OGMA's to be designated is calculated according to the procedures outlined in the document "Planning and Analysis of Old Forest Requirements in SRP's" (Appendix VIII). An analysis step was added to estimate and meet minimum interior forest condition targets.

Representation of rare site series, as represented by rare surrogate ecosystems such as leading spruce and deciduous forest types, is an important aspect of planning for both OGMA's and Wildlife Tree Patches (see Sec. 4.10.3a), is a requirement of the CCLUP, and is consistent with direction from the Biodiversity Guidebook. The CCLUP targets and strategies include the following: (See Appendix VII).

[Under Fish and Wildlife targets for the Anahim Lake IRMZ and Kleene Kleene IRMZ]

- *"To manage for ... species at risk and other sensitive habitats ... and throughout the polygon under the biodiversity conservation strategy, including key leading spruce stands".*

[Under Fish and Wildlife and Biodiversity Conservation Strategies]

- *"Consistent with the targets, maintenance of deciduous (aspen) and spruce components are important considerations on the Chilcotin Plateau."*

Accordingly, the objectives for old seral representation outlined below include the provision for OGMA's to capture these important biodiversity elements in significantly greater proportion than is their occurrence in the landscape/BEC.

Objectives	***Strategies***

Maintain old growth forest attributes throughout each rotation in the Old Growth Management Areas (OGMA's), as recommended, on Map 9.	• Immediately establish and maintain Old Growth Management Areas to meet the current and long-term Old Seral Forest and Interior Old Forest Objectives.
	• commercial timber harvesting is not permitted in the OGMA's.
	• within the OGMA's the following forest practices will be permitted:
	  • cone collection,
	  • fire suppression,
	  • forest heath actions under specified circumstances.
	• Allow natural processes of insect and diseases presence within the OGMA's.
	• If forest health action is required, action will

	be performed by single tree selection of infested trees only, to maintain old growth structure. • Roads will not be constructed in OGMA's unless required as part of initial attack fire suppression or forest health action. In the case of fire suppression or forest health action, road construction within OGMA's will be avoided if at all possible, and replaced by skid and/or winter trails. If road construction cannot be avoided, it will be to the minimum standard necessary to permit removal of felled trees. • Primary haul roads within OGMA's are not permitted. • Secondary roads required to be built in OGMA's as part of fire suppression or forest health action will be subject to deactivation and rehabilitation immediately following completion of operational activities.
	• If fire or required forest health action removes greater than 10% of any OGMA within a 20 year period (removed portion calculated as basal area equivalent hectares plus patch cut/burned hectares), an assessment will be conducted as to whether the removed portion will be replaced by an equivalent hectarage of forest with the most suitable available OGMA attributes, or whether the OGMA will be replaced. • MOF and MELP will jointly finalize strategies around managing forest health action within OGMA's.
Maintain, over time, minimum old forest interior conditions in each BEC portion of each Landscape Unit according to the distribution of percentages of the productive forest land base outlined in Table 5.	• Until more definitive guidance is available, contributing old forest interior conditions are defined as old seral forest greater than 200m from the edge of existing or potential early seral forest. Under this definition, forest outside OGMA's and other designated non-IDF fir group no harvest area is assumed to be existing or potential early seral forest. IDF fir group forest outside OGMA's and other designated no harvest areas is assumed to be subject to partial cut and thus no 200m buffer is required in calculating contributing old forest interior conditions.

	• Minimum old forest interior conditions in each landscape/BEC unit will be met immediately in old forest designated as contributing to the current minimum old seral target. • MOF and MELP will jointly conduct an analysis in which the area of old forest interior conditions currently supplied by OGMA's (long term and transition) and other no harvest areas will be calculated as a test against the targets outlined below in Table 5.
Provide representation over time of rare old growth forest site series by retaining in OGMA's a % of the productive forest land significantly greater than their occurrence in each landscape/BEC unit, in the following surrogate rare ecosystems in old growth condition: • ***SBPS old seral forest:*** ***- pure or leading spruce*** ***- pure or leading deciduous (any species)*** ***- pure pine <20% dead*** • ***MS old seral forest:*** ***- riparian old seral leading spruce*** ***- old seral leading deciduous*** • ***Other rare ecosystems as identified and required by assessment***	• MELP in conjunction with MOF will conduct an assessment to define, measure (hectares) and map the area of rare site series/surrogate ecosystems occurring in each landscape/BEC unit to provide a basis for meeting the objectives for rare old growth representation. Existing information such as site series mapping from Terrestrial Ecosystem Mapping products will be used where possible. • The above assessment will provide detailed direction for how rare site series/ecosystems will be represented in OGMA's and WTP's. • Rare site series/surrogate ecosystems should be represented in OGMA's at a proportion significantly greater than their occurrence in the LU/BEC unit.

Table 5. Minimum Old Growth Forest Interior Conditions (% of productive forest landbase)

Landscape Unit	BEO Column B*	NDT 2		NDT 3				NDT 4			
		ESSFxv1 ESSFmw ESSFmc		SBPSxc SBPSmc		MSxv MSdc2		IDFdk4 pine IDFdw pine IDFunv pine IDFww pine		IDFdk4 fir IDFdw fir IDFunv fir IDFww fir	
		old	old interior (% of old)	old	Old interior (% of old)	Old	old interior (% of old)	old	old interior (% of old)	old	old interior (% of old)
Alplands	**High**	>13	**25**	>10	**25**	>21	**25**				
Atnarko	**High**	>13	**25**	>10	**25**	>21	**25**	>16	**25**	>32	**50**
Beeftrail/Far	High	>13	**25**	>10	**25**	>21	**25**				
Big Stick	**Intermediate**	>9	**25**	>7	**25**	>14	**25**	>11	**25**	>21	**50**
Christensen	Intermediate	>9	**25**	>7	**25**	>14	**25**				
Clearwater	**Intermediate**	>9	**25**	>7	**25**	>14	**25**	>11	**25**	>21	**50**
Colwell	**Intermediate**	>9	**25**			>14	**25**	>11	**25**	>21	**50**

Corkscrew	High	>13	**25**	>10	**25**	>21	**25**				
Holtry	Intermediate	>9	**25**	>7	**25**	>14	**25**				
Hotnarko	**High**	>13	**25**	>10	**25**	>21	**25**	>16	**25**	>32	**50**
Klinaklini	Intermediate	>9	**25**	>7	**25**	>14	**25**	>11	**25**	>21	**50**
McClinchy	Intermediate	>9	**25**	>7	**25**	>14	**25**				
Nimpo	**Intermediate**			>7	**25**	>14	**25**				
Telegraph	High	>13	**25**	>10	**25**	>21	**25**	>16	**25**	>32	**50**
Tusulko	**High**	>13	**25**	>10	**25**	>21	**25**				
Upper Dean	Intermediate	>9	**25**	>7	**25**	>14	**25**				

* = BEO enhanced from Integration scenario in bold

4.10.2d Spatial and Temporal Distribution of Cut and Leave Areas

Planning for temporal as well as spatial distribution of cutblocks is a CCLUP requirement (Appendix VII):

[Fish and Wildlife and Biodiversity Conservation Strategies]

- *conserve biological diversity through the establishment of ... temporal distribution of cutblocks ... These targets will be applied at the Landscape Unit level ... Application of these guidelines in all zones and polygons is required.*
- *Over time develop long term plans (at least 20 years) for all areas in order to ensure that the biodiversity conservation objectives and all other objectives of the plan are met ... Cut distribution over time (existing and future) ... will be addressed.*
-

The target ranges for patch sizes outlined in Table 6 provide for varying portions of the forest landbase to be in early seral forest created by cutblocks in the 80 - 250 ha and 250 - 1000 ha size ranges, which are larger than the 60 ha default maximum cutblock size provided for under the Forest Practices Code. The concepts and principles behind these large cutblocks have been discussed and endorsed by the Anahim Round Table, and a number of large cutblocks (150 - 500 ha) have been implemented on a trial basis in the Tusulko, Beeftrail and Corkscrew Creek areas. Their success is being monitored with respect to impacts and/or benefits to visual, habitat and other values. For the purposes of this SRP, initial public consultation around large cutblocks can be considered successfully completed, and SDM approval of LU objectives for large cutblocks can be based on follow-up consultation regarding the success of the trials already implemented.

Included in the principles around large cutblocks is leave areas of sufficient size. The objective outlined below for leave areas approximately three times the size of associated cutblocks is based on a four pass model over a total 80 year rotation: year one of each of four 25% passes are separated by approximately 20-year green-up periods, followed by a final 20-year green-period ending at year 80 which corresponds to year one of second rotation.

Objectives	*Strategies*

Achieve a landscape pattern of forest patch size distribution, to be maintained over time, that is consistent with the Natural Disturbance Types in the Landscape Units, by applying the target patch size ranges in Table 6 to seral stage changes created by logging.	• MOF and MELP will jointly conduct an assessment to:
	  • define forest patch
	  • assess the current patch size condition of the landscape/BEC units in the SRP area
	• the above assessment will provide a basis for operational guidance throughout the SRP area regarding seral stage changes created by logging to achieve the target patch size ranges in Table 6.
	• Patches created by both natural disturbance and logging are included in analysis of current patch size distribution, however patch size distribution can only be influenced by:
	  • early seral patches created by logging, or
	  • low-removal partial cutting of old seral forest which may retain mature seral attributes.
	In this way, target patch size distribution is achieved and maintained over a rotation by application to seral changes created by logging.
	• After forest patches are defined and the patch size analysis is completed, each Forest Development Plan should include a text description of how the plan approximates, or significantly moves towards, the desired patch size objectives.

Achieve a landscape pattern of forest patch size distribution in which non-greened up early seral patches created by logging are associated with unfragmented leave areas approximately three	• MOF and MELP will jointly develop the methodology for defining and monitoring leave areas. • Leave areas are not no harvest areas, they are

times the size of the non-greened up early seral patch created by logging.	areas left for harvest later in the rotation; leave areas will not necessarily be defined by each individual cutblock. • Leave areas approximately three times the size of associated logged areas will be identified and monitored operationally as an element of the Chilcotin Forest District Consolidated Forest Development mapping process.

Table 6. Target Ranges for Temporal and Spatial Distribution of Cutblocks

NDT2		NDT3	NDT4	NDT4	
ESSF		SBPS MS	IDF pine	IDF fir	
Patch size (ha)	***% of forest***	***patch size***	***% of forest***	***patch size***	***% of forest***
<40	30 - 40	<40	10 - 20	<40	30 - 40
40 – 80	30 - 40	40 - 250	10 - 20	40 - 80	30 - 40
80 – 250	20 - 40	250 – 1000	60 - 80	80 - 250	20 - 40

4.10.2e Landscape Connectivity

The Biodiversity Guidebook provides guidance on the importance of the natural connectivity characteristics of each natural disturbance type, however the application of Forest Ecosystem Networks (FENs) has changed since its introduction in the Biodiversity Guidebook. Current policy dictates that maintenance of connectivity should not create a timber supply impact exceeding government's maximum for FPC impact. FENs are now considered to be the combined total of many landscape biodiversity elements, including the mature and old forest within the various types of planned retention listed below:

- minimum FPC riparian reserve and management zones
- wildlife trees and wildlife tree patches
- strategic location of OGMA's
- other no harvest and modified harvest areas including:
  - Community Areas of Special Concern (Dean Corridor, Charlotte Alplands etc.)
  - Class A lakes
  - trail no harvest reserves and modified harvest zones
  - caribou no harvest and modified harvest zones
  - visual retention VQO areas
- planned connectivity corridors with prescriptions for temporal and spatial distribution of partial cut and clear-cut harvesting and leave areas

Managing for landscape connectivity is a CCLUP requirement (Appendix VII):

[Fish and Wildlife and Biodiversity Conservation Strategies]

- *"conserve biological diversity through the establishment of ... landscape connectivity ... These targets will be applied at the Landscape Unit level ... Application of these guidelines in all zones and polygons is required."*

The Integration Report states that:

"While the analysis did address seral stage requirements, it did not address issues of connectivity which are also of importance in biodiversity conservation. The expectation is that these requirements will be addressed at the sub-regional and operational levels through various mechanisms including overlaps and through modified harvest approaches which do not limit access to timber beyond a rotation."

The Base Case scenario for this SRP included 200m wide no harvest buffers around main wetland complexes and riparian corridors, which functioned as one type of FEN (no harvest) that provided extensive forest connectivity in certain portions of the SRP area. As outlined above in Sec. 4.10, these no harvest areas were deleted from this recommended scenario, and this results in a lack of forest connectivity in some portions of the SRP area. This lack forest connectivity represents a level of risk to certain wildlife species that this SRP recommends should be assessed by MELP (see Section 4.10.6 for risks to biodiversity, fish and wildlife and recommended conservation assessments). In particular, Fisher which is a blue-listed species, some other furbearer species (e.g. Marten) and moose which is a regionally important species, require additional measures in this SRP scenario. These measures would:

- be designed as connectivity corridors with no additional long term EEA impact (i.e. "within-rotation")
- be designed to enhance forest connectivity across the landscape utilizing multi-pass cutting scenarios including within-rotation partial cutting, including along main riparian corridors and wetland complexes
- would maximize overlaps wherever possible with other retention (OGMA's, visual areas etc.) and with rare ecosystems and sensitive habitats including leading spruce and deciduous forest types.

Objectives	*Strategies*
Protect and maintain landscape connectivity over time to assist maintenance of all native species and ecological processes. ***Within the Connectivity Corridors/FENS, maintain landscape connectivity by implementing the applicable prescriptions within the applicable boundaries.***	• MELP will undertake an assessment to determine forest landscape connectivity requirements in support of maintaining wildlife species and ecological processes, and to define and map connectivity corridors and (in conjunction with MOF) appropriate management prescriptions. • To be mapped during Landscape Unit Planning.

4.10.2f Species Composition

Managing for species composition is a CCLUP requirement (Appendix VII):

[Fish and Wildlife and Biodiversity Conservation Strategies]

- *"conserve biological diversity through the establishment of ... species composition ... These targets will be applied at the Landscape Unit level ... Application of these guidelines in all zones and polygons is required."*

Objectives	*Strategies*
Maintain over time the variety and distribution of tree species characteristics of the LU/BEC unit before harvesting.	• Conduct landscape level assessment of the tree species characteristics of the LU/BEC unit before harvesting, and maintain these characteristics at the forest development operational level.

4.10.2g Sensitive Habitats and Rare Ecosystems

Protection and maintenance of sensitive habitats and rare ecosystems across the landscape is a requirement of the CCLUP, and is consistent with direction from the Biodiversity Guidebook. The declared provisions of the CCLUP include the following (Appendix VII):

[Strategy for Species and Habitats at Risk]:

- *Undertake forest inventory to identify species and habitats at risk and management needs*
- *Prepare and implement recovery plans for rare and endangered species*
- *Consistent with the targets, establish Wildlife Habitat Areas, Sensitive Areas or other appropriate classifications under the FPC as required to protect these species and habitats*

[Under Fish and Wildlife targets for all CCLUP zones]:

- *"To manage for ... species at risk and other sensitive habitats ... and throughout the polygon under the biodiversity conservation strategy, [and for Anahim Lake IRMZ and Kleene Kleene IRMZ]including key leading spruce stands".*

[Fish and Wildlife and Biodiversity Conservation Strategies]:

- *"Consistent with the targets, maintenance of deciduous (aspen) and spruce components are important considerations on the Chilcotin Plateau."*

In section, 4.10.2c, (Landscape level old seral representation), and section 4.10.3a, (stand level, wildlife tree retention), objectives are provided for representing rare mature

and old forest site series and surrogates (spruce and deciduous forest types), in both OGMA's and WTP's, in portions significantly greater than their occurrence in the LU/BEC unit. The objective and strategy provided below addresses the need for a more comprehensive approach for identifying, protecting and maintaining sensitive habitats and rare ecosystems within the SRP area including:

- sensitive habitats and rare ecosystems in addition to spruce and deciduous forest types (e.g. Old seral pine forest with low levels of endemic insects and/or disease; pine mushroom habitats)
- sensitive habitats as required to support wildlife species at risk

It should be noted that under the Operational Planning Regulation of the FPC, species at risk include threatened or endangered plants or plant communities. Of the four such plant communities designated so far in B.C. under the IWMS of the FPC, none occur in the ART SRP area. However, the results of Terrestrial Ecosystem mapping within the SRP area are not yet available and may yield important new information about sensitive habitats and rare ecosystems.

Objectives	*Strategies*
Protect and maintain, over time, sensitive habitats and rare ecosystems across all LU/BEC units, sufficient to maintain in perpetuity all native plant species, plant communities, and wildlife species and populations.	• MOF and MELP to jointly undertake inventory and assessment to identify sensitive habitats and rare ecosystems, and requirements for their protection and maintenance • Requirements will include the types, proportions and locations of leading spruce forest types to be managed through partial cutting prescriptions to establish and maintain uneven age stand structure over time (modified harvest prescriptions will be within the SRP scenario and consistent with timber targets).

4.10.2h Grasslands

The following is the CCLUP Strategy for Grasslands:

Many of the species at risk in the region are found on the grasslands of the region. Research and inventory has begun on these species and additional management requirements will be developed in the future. To date seven red-listed species and thirty-two blue listed species have been recorded. In the interim the following the following is required:

- *continuation of present research and inventory programs to further identify species and habitats of concern. Management of these habitats should consider all resource values*
- *management of critical habitat through the FPC and Riparian and Biodiversity Guidelines including the designation of Sensitive Areas or Wildlife Habitat areas. Safeguarding riparian habitats is of particular importance.*

- *maintenance of [grassland] climax seral communities targets as defined by the Biodiversity Guidelines specific targets (by landscape unit) are: 12% climax seral state, 85% near climax state.*
- *establish planning and monitoring processes to ensure that the utilization levels and recovery (targets specified above) are achieved in a timely manner.*
- *provision of funds under the Grazing Enhancement Fund to ensure that the targets can be met.*
- *ensure that conservation values are not degraded through forage enhancement activities; for example, the timing of any range burns should be such that ground nesting birds are not affected.*

The CCLUP Strategy for Enhancement contains the following excerpt:

- *Undertake an assessment of fish and wildlife enhancement and acquisition opportunities and the development of these identified opportunities.*
- *Specific opportunities include:*

  ...

  iii) Research and inventory in forested and non-forested habitats (including grasslands) to identify species at risk and enhancement needs

  iv) Removal of young aspen and Douglas fir stands which are encroaching on grasslands

The CCLUP Strategy for Research and Inventory contains the following excerpt:

- *areas which should receive immediate attention are:*

  ...

  - *Grassland habitats and the grassland complex of species at risk*

Grassland communities are ecologically very important and in this region are primarily located in the IDF zone, of which there are areas in the following Landscape Units in the ART area:

- Atnarko
- Big Stick
- Clearwater

The SBPS can also contain grassland areas of ecological significance. Unique ecological values of grassland communities in the ART area, including any species at risk that may be present, are currently not known. Consistent with CCLUP direction, research and inventory is required to address this knowledge gap.

Objectives	***Strategies***
Protect and maintain the integrity and functions of grassland ecosystems across the landscape, including all native plant communities and suitable habitat conditions for all native species.	• MELP will conduct an inventory and assessment of grassland habitats present within the ART SRP area, including identification of any species and habitats of concern, and management actions that may be required to protect and maintain the values.
Maintain or exceed over time the area of open range grassland that was present at the time of	• Manage the grasslands of the Anahim Round Table SRP consistent with the Grassland

the first forest cover inventory of the ART SRP area.	Strategy presently under development by MOF and MELP.

4.10.3 Biodiversity at the Stand Level

4.10.3a Stand Structure and Wildlife Tree Retention

Managing for stand structure and wildlife tree retention is a CCLUP requirement (Appendix VII):

[Fish and Wildlife and Biodiversity Conservation Strategies]

- *"conserve biological diversity through the establishment of ... stand structure ... and retention of wildlife trees.... These targets will be applied at the Landscape Unit level ... Application of these guidelines in all zones and polygons is required."*

Representation of rare site series, as represented by rare surrogate ecosystems such as leading spruce and deciduous forest types, is an important aspect of planning for both OGMA's and Wildlife Tree Patches, is a requirement of the CCLUP, and is consistent with direction from the Biodiversity Guidebook. The CCLUP targets and strategies include:

[Under Fish and Wildlife targets for the Anahim Lake IRMZ and Kleene Kleene IRMZ]

- *"To manage for ... species at risk and other sensitive habitats ... and throughout the polygon under the biodiversity conservation strategy, including key leading spruce stands".*

[Under Fish and Wildlife and Biodiversity Conservation Strategies]

- *"Consistent with the targets, maintenance of deciduous (aspen) and spruce components are important considerations on the Chilcotin Plateau."*

Accordingly, the objectives for WTR outlined below include the provision for WTP's to capture these important biodiversity elements in greater proportion than is their occurrence in the landscape/BEC.

For the leading spruce forest types, an additional objective is provided for managing a portion of these important sensitive habitats over time under partial cutting prescriptions and regimes to maintain uneven age stand structure including large, old dead and dying spruce trees. This is in recognition of the critically important habitat function that old spruce forest types provide to regionally important species, especially furbearers and moose. The old seral forest attributes of these areas that are important include large woody debris for furbearers (standing, leaning and downed), especially along riparian corridors, and visual and thermal cover attributes for moose around key wetlands and wetland complexes. These habitat types have not yet been properly inventoried, however their occurrence is likely to be much reduced from historic levels in the future managed forest landscape. It will be necessary to manage for these stand level attributes

strategically across the landscape through partial cutting regimes, including at younger stand ages.

Objectives	*Strategies*
Maintain the structural diversity of managed forests by retaining wildlife trees and wildlife tree patches to meet the targets for each landscape/BEC unit according to Table 20(a) of the Biodiversity Guidebook.	• Existing Chilcotin Forest District WTP Guidelines will be kept in effect until Landscape Unit objectives have been legally established, after which Table 20(a) of the Biodiversity Guidebook takes effect. • An analysis will be conducted by Chilcotin Forest District to update the Chilcotin Forest District WTP guidelines including accurate specification of each landscape/BEC unit with respect to Table 20(a) of the BGB. • Clarify requirements for partial cutting.
Provide representation over time of rare old growth and mature forest site series by retaining in WTP's, a % of the productive forest land significantly greater than their occurrence in each landscape/BEC unit, in the following surrogate rare ecosystems in mature or old seral condition: • ***SBPS mature or old seral forest:*** ***- pure or leading spruce*** ***- pure or leading deciduous (any species)*** ***- pure pine <20% dead*** • ***MS mature or old seral forest:*** ***- riparian old seral leading spruce*** ***- old seral leading deciduous*** • ***Other rare ecosystems as identified and required by assessment***	• Undertake an assessment to define, measure (hectares) and map the area of rare site series/surrogate ecosystems occurring in each landscape/BEC unit to provide a basis for meeting the objectives for rare old growth representation. • The above assessment will provide detailed direction for how rare site series/ecosystems will be represented in OGMA's and WTP's. • Rare site series/surrogate ecosystems should be represented in WTP's at a proportion .significantly greater than their occurrence in the LU/BEC unit.
Manage a portion, yet to be determined, of the leading spruce forest types in each LU/BEC unit under partial cutting prescriptions to maintain uneven age stand structure over time	• Undertake an assessment of leading spruce sensitive habitat attributes that need to be maintained across the landscape over time, including those associated with: • riparian corridors, key wetlands and wetland complexes, • even and uneven age stand structures at various ages. • Develop and implement landscape and stand level prescriptions for maintaining leading spruce habitat attributes across the landscape

	over time.

4.10.3b Riparian Habitat Management

Riparian Management Areas include both the area dominated by continuous high moisture content, and the associated adjacent upland vegetation. Riparian ecosystems contain many of the highest value non-timber resources in the natural forest. This is reflected in the specific CCLUP references to the Riparian Management Area Guidebook of the FPC, as well as other CCLUP targets and strategies that reference the importance of protecting riparian habitats.

Objectives	*Strategies*
Riparian Objective #1 ***Throughout the rotation, protect and maintain riparian habitat, and enhance landscape connectivity, by applying the following riparian habitat measures in LU/BEC units outside the Itcha Ilgachuz SRDZ :*** ***a) All streams: average 20m forest no harvest reserve zone, or equivalent excluded area partial cut, within applicable Forest Practices Code RMA prescription.*** ***b) Wetlands .5 - 1.0 ha: average 10m forest no harvest reserve zone, or equivalent excluded area partial cut, if shown on the FC1 file.*** ***c) Wetlands over 1.0 ha - average 20m forest no harvest reserve zone, or equivalent excluded area partial cut, within applicable Forest Practices Code RMA prescription.***	• "Forest no Harvest Reserve Zone" is defined as consisting of productive forest land vegetated by coniferous and/or deciduous forest of any seral stage.
Implement the FPC Riparian Management Area Guidebook, using the riparian reserve widths revised as outlined in Objective #1	• Silviculture prescriptions for Riparian Management Areas should vary the width of the Riparian Reserve Zone and/or Riparian Management Zone (subject to SDM approval) as described in the Riparian Management Area Guidebook to protect wildlife features, high value wildlife trees, or to reduce

	windthrow hazard. • Silviculture prescriptions for Riparian Management Areas should include practices that normally meet or exceed the "best management practices" of the Riparian Management Area Guidebook. • MELP and MOF should be consulted when developing alternative prescriptions for Riparian Management Areas where the "best management practices" are not appropriate due to site-specific conditions. • Range management for Riparian Management Areas should be consistent with the Riparian Management Area Guidebook. • Haying and grazing of grasslands and wetlands must be carefully managed to maintain environmental resource values.
Manage for Furbearers and other Wildlife within Riparian Management Zones and L1 Lakeshore Management Zones.	• Do not harvest Douglas fir, large diameter aspen or cottonwood and low windthrow hazard spruce in Riparian Management Zones. • Use no-work zones to retain trees valuable to wildlife within Riparian Management Areas, while complying with WCB regulations. • A qualified Wildlife/Danger Tree Assessor should determine which trees within a Riparian Management Area are high value wildlife trees and which require protection with no-work zones.

The SRP scenario proposed by the community modelled 6% of the productive forest land as riparian no harvest, applied uniformly to all Landscape Units. This is consistent with CCLUP Integration which assumed 6% riparian no harvest, modelled as 25m reserves on all lakes, wetlands and streams on the MOF forest cover map base, applied uniformly to all subunits, representing riparian reserve and management zone impacts. Accordingly, the riparian measures were "topped-up" in this SRP scenario to as close to 6% as could be modelled, summarised in Table 7.

Table 7. Riparian Reserve Top-ups for SRP Area

Riparian measure	Total area (ha)	% of total pfl *
• Minimum FPC (combined reserve and management zone EEA).	21,234	5.08
• Riparian top-up 1**: add 20m reserve to unbuffered streams; add 10m reserve to .5 - 1.0 ha wetlands if shown on FC1 file.	2082	.50

• Riparian top-up 2**: wetlands 1 - 5 ha, upgraded 30m riparian management zone to 20m reserve zone (equivalent to adding 12.5m reserve to RMZ EEA of 7.5m); wetlands > 5ha increase 10m reserve to 20m reserve within 40m RMA.	1654	.40
• Total riparian top-up.***	3736	.89
Total riparian reserve and management zones.	25,664	5.98

* pfl = productive forest land = 417, 881 for ART SRP area
** riparian top-ups applied only to portions of streams/wetlands outside areas already excluded by other constraints, except where specified as upgrading the RMZ portion of an RMA to reserve
*** no riparian top-up applied in Itcha Ilgachuz SRDZ since minimum FPC EEA was already at 6.71%

The riparian reserve "top-ups" were applied spatially across the SRP area except within the Itcha/Ilgachuz SRDZ which had 6.7% riparian no harvest with no riparian top-up.

4.10.3c Species Composition

Managing for species composition is a CCLUP requirement (Appendix VII):

[Fish and Wildlife and Biodiversity Conservation Strategies]
- *"conserve biological diversity through the establishment of ... species composition ... These targets will be applied at the Landscape Unit level ... Application of these guidelines in all zones and polygons is required."*

Objectives	*Strategies*
Maintain the variety and distribution of tree species characteristics of the LU/BEC unit before harvesting.	• Regenerate forest stands (both conifer and deciduous leading), including tree, understory (shrub) and forest floor (herb) communities, that are similar to the original natural forest stands for that site and seral age.

4.10.3d Coarse Woody Debris

Managing for coarse woody debris is a CCLUP requirement (Appendix VII):

[Fish and Wildlife and Biodiversity Conservation Strategies]
"conserve biological diversity through the establishment of ... retention of coarse woody debris ... These targets will be applied at the Landscape Unit level ... Application of these guidelines in all zones and polygons is required."

While retention of coarse woody debris is an important element of managing for biodiversity, quantitative objectives by ecosystem are unavailable and there may be conflicts with timber utilization. The objective would be to retain as much coarse woody debris as possible, consistent with size, types and distribution present on site at the stand level prior to harvest.

4.10.4 Wildlife Habitat

The wildlife populations that are supported by the ART SRP area are valuable and diverse. The Itcha/Ilgachuz caribou herd, moose and furbearer species are of particular importance. Moose and furbearers are important for First Nations use, as well as for guide-outfitters, trappers and hunters. The wildlife of particular concern are Grizzly Bear, Moose, Woodland Caribou, American White Pelican, Northern Goshawk, Fisher and other furbearers. A summary of the biology of these wildlife species (excerpts from IWMS) is provided in Appendix IX.

4.10.4a CCLUP Legal and Policy Framework for Wildlife Habitat

In addition to measures under the CCLUP and the Landscape Unit Planning Process (riparian buffers, recreation areas, caribou habitat, lakeshore management zones, OGMA's etc.) the Forest Practices Code provides for the protection of species at risk under the Identified Wildlife Management Strategy (IWMS).

- Wildlife species considered:
  - red listed - endangered (facing imminent extirpation or extinction) and threatened (likely to become endangered if limiting factors are not reversed)
  - blue listed - vulnerable (particularly sensitive to human activities or natural events)
  - regionally important - populations are believed to be at risk due to forest or range practices and "coarse filter" provisions (large protected areas etc.) are inadequate.
- Threatened and endangered plants or plant communities

The IWMS provides for:

- Wildlife Habitat Areas (WHA's) - mapped areas of habitat which are biologically limiting to a species or are remaining examples of identified plant communities.
- General Wildlife Measures (GWM's) – describe the activities that are allowed or prohibited within an approved WHA or a designated ecosystem unit

The IWMS provides for WHA's and GWM's for specified species including the following which occur within the ART SRP area:

- American white pelican
- Northern goshawk (*atricapillus* subsp.)
- Sandhill crane
- Mountain goat
- Bighorn sheep

Additional species designated by the IWMS for WHA's and GWM's may occur within the ART SRP area but which have not yet been documented. Potential examples include:

- American bittern
- Great Blue Heron
- Sharp-tailed grouse
- Trumpeter Swan
- Peregrine falcon

Inventory and assessment is required to determine a complete list of species at risk and associated management strategies for the ART SRP area.

For three additional species, the IWMS provides for Wildlife Higher Level Plan Objectives (HLPO's):

- fisher
- grizzly bear
- bull trout

(excerpted from the IWMS training package)
The above three species [all blue listed] have widespread habitat needs that cannot be completely captured within discrete areas of limiting habitat. They have large home ranges, occur at low densities, have widely and sparsely distributed limiting habitats, or are sensitive to landscape level disturbance. The requirements of such species must be addressed over large areas, such as regions or subregions, in order to effectively manage their habitat. In addition, since these HLP recommendations are not restricted to discrete areas, it is difficult to measure the forestry and range impacts associated with them. Their impact on the short-term timber supply is likely to exceed the 1% applied to the entire IWMS provincially. Exceeding this limit will be the social choice made by strategic planning tables.
[Policy direction is that]
This can be addressed by tables that have not yet passed the scenario development stage. If they are past this stage, HLP species can be addressed at the time scheduled for plan review.

Higher level planning recommendations are not mandatory, but have been drafted by government staff for consideration by planning tables in areas where the planning table wishes to ensure the population viability of the species. They are intended to be applied in localized portions of a planning area and to be considered within the context of other species' habitat needs, measures to conserve biodiversity, other resource values, and social and economic issues. Through this process, the planning table can determine the appropriate balance for their area.

Planning tables can decide to recommend management for any species, whether it has been identified as a higher level plan species or not. Recommendations from planning tables can exceed the impact level laid out by government for the IWMS. Unless conservation assessments indicate that additional measures are needed, government is unlikely to approve recommendations for other IWMS species because the strategy is considered adequate.

There may be additional species with higher level plan recommendations in volume 2 [of the IWMS guidebook].

The additional following species are considered regionally significant and occur within the ART SRP area, but their habitat requirements are not addressed by the IWMS;

- caribou - covered by Regional Caribou Strategy which is currently being updated
- moose - see CCLUP strategy requirements below
- marten and other furbearer species other than fisher

For these species, this SRP recommends:

- Wildlife Higher Level Plan Objectives: since the CCLUP is already declared, these would need to be in the form of future amendments to the CCLUP, which may be considered for other issues as well, or
- General Wildlife Measures for designated ecosystem units: in the form of Landscape Unit Objectives, referred to as wildlife LUO's.

For all other species, this SRP recommends measures in the form of General Wildlife Measures for designated ecosystem units, which are in the form of Landscape Unit Objectives. Accordingly this text refers to Wildlife LUO's as an overall substitute for WHA's, GWM,s or any other like terms.

Table 8 is a summary of the fish and wildlife species occurring in the ART area that are designated species at risk or otherwise regionally important, and the measures available to protect their habitats.

Table 8. Regionally Significant Species in the SRP Area

Species	red or blue listed *	CCLUP direction **	IWMS measure		outstanding issues	
			WHA's with GWM's	Wildlife HLPO's or GWM's for desig. Eco. Units		
Species at risk:						
American White Pelican	R	Yes	Yes		conservation assessment	

Species	red or blue listed *	CCLUP direction **	IWMS measure		outstanding issues	
			WHA's with GWM's	Wildlife HLPO's or GWM's for desig. Eco. Units		
					required (any missing lakes?)	
Woodland Caribou	R	Yes		Yes	CCLUP Strategy Update in progress	
Fisher	B	Yes		Yes	conservation assessment required	
Grizzly Bear	B	Yes	Yes	Yes	Conservation assessment required	
Bull Trout(/Dolly Varden)	B	Yes	Yes	Yes	Conservation assessment required	
Sandhill Crane	B	(yes)	Yes		Conservation assessment required	
Northern Goshawk *(atricappilus sp.)*		(yes)	Yes		Conservation assessment required	
Additional Regionally Important Species:		Yes				
Moose		Yes		Yes	Conservation assessment required	
Marten and Other Furbearer species		Yes		Yes	conservation assessment required	
Mule Deer		Yes		Yes		
American Bittern?		(yes)	Yes			
Great Blue Heron?		(yes)	Yes			
Trumpeter swan?		(yes)	Yes			
Peregrine falcon?		(yes)	Yes			
Sharp-tailed grouse?		(yes)	Yes			
Any other listed birds/waterfowl?		(yes)	Yes			
Any listed bats?		(yes)	Yes			

* red listed - endangered (facing imminent extirpation or extinction)
- threatened (likely to become endangered if limiting factors are not reversed)

*blue listed - vulnerable (particularly sensitive to human activities or natural events)

** yes - specifically named in Fish and Wildlife targets

**(yes) - not individually named in Fish and Wildlife targets, but included in the targets for "other sensitive habitats" and the Strategy for Species and Habitats at Risk

The following is an overall objective and strategy for conserving habitat for wildlife within the ART SRP area.

Objectives	*Strategies*

Protect and maintain sufficient quantity and quality of habitat for all native wildlife species to sustain their populations in perpetuity throughout the ART SRP area.	• MELP will conduct an inventory/assessment of the ART SRP area to:
	  • Finalise the list of species at risk and regionally significant species that are known to occur, and which may occur, within the ART SRP area; and
	  • Compile existing information and knowledge gaps regarding the habitat requirements of all native wildlife species within the ART SRP area.
	• Develop and implement habitat management strategies to maintain suitable habitat conditions for all native species in the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures.

4.10.4b American White Pelican

Objectives	*Strategies*
Protect American White Pelican feeding lakes from disturbance, using the measures in the Managing Identified Wildlife: Procedures and Measures.	• Complete the inventory of important lakes and habitat for feeding and/or nesting for American White Pelican in the ART SRP area • Establish a Wildlife LUO, around Anahim, Abuntlet, Dusty, Aktaklin and Pelican Lake, and or any other lakes identified as being important pelican habitat. The Wildlife LUO's consist of a 1 km buffer around each lake, to address access and timing window restrictions (not a no harvest buffer). The access management Wildlife LUO, means that any new road or trail development within the LUO will be rendered impassable to 4x4 pickups immediately after harvest completion. • Bladed access structures must be minimized, with winter logging strongly preferred.

4.10.4c Fisher

See Appendix IX, for excerpts from the IWMS outlining fisher biology, habitat requirements and suitable management strategies. The fisher is a blue-listed species at

risk, and is one of three species for which the IWMS provides for Wildlife Higher Level Plan Objectives to address habitat needs that cannot be completely captured within discrete areas of limiting habitat.

Objectives	*Strategies*
Protect and maintain sufficient quantity and quality of habitat for fisher to maintain healthy populations of fisher in perpetuity across its historic range in the ART SRP area.	• MELP with associated partners will conduct inventory of fisher distribution and habitat requirements within the ART SRP area. • MELP in conjunction with MOF will develop and implement habitat management strategies to maintain suitable habitat conditions for fisher across it's historic range in the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures, including Wildlife Higher Level Plan Objectives.

4.10.4d Grizzly Bear

Objectives	*Strategies*
Protect and maintain sufficient quantity and quality of habitat for Grizzly Bear throughout the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures.	• MELP with associated partners will conduct inventory for critical grizzly bear foraging areas and other critical habitats. • MELP in conjunction with MOF will establish Wildlife LUO's for critical grizzly bear habitat areas, and/or Wildlife Higher Level Plan Objectives, as required and described in the Managing Identified Wildlife: Procedures and Measures.

4.10.4e Bull Trout

See Appendix IX, for excerpts from the IWMS outlining bull trout biology, habitat requirements and suitable management strategies. The bull trout is a blue-listed species at risk, and is one of three species for which the IWMS provides for Wildlife Higher Level

Plan Objectives to address habitat needs that cannot be completely captured within discrete areas of limiting habitat.

Objectives	*Strategies*
Protect and maintain sufficient quantity and quality of habitat for bull trout to maintain viable populations of bull trout in perpetuity across it's historic range in the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures.	• MELP with associated partners will undertake inventory of bull trout distribution and habitat requirements within the ART SRP area. • MELP in conjunction with MOF will develop and implement habitat management strategies to maintain suitable habitat conditions for bull trout across it's historic range in the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures, including Wildlife Higher Level Plan Objectives.

4.10.4f Woodland Caribou

Protection of habitat for this red-listed species at risk is a requirement of the CCLUP, and is the subject of the CCLUP Caribou Committee. The analysis for this SRP used the caribou management zone boundaries and prescriptions from the 1998 Caribou Strategy update. The Caribou Committee is currently developing a final updated Caribou Strategy expected in the spring of 2001 and which this SRP will implement. The caribou management zones are likely to be significantly revised, however the portion of the SRP EEA that is attributable to management for caribou will not be affected.

Objectives	*Strategies*
Protect Caribou habitat quality and quantity, within the Caribou No-harvest and Caribou Modified-harvest areas, and to a limited extent within the Conventional harvest part of their natural range, using the measures in the CCLUP Caribou Strategy.	• MELP and MOF will jointly implement the updated Caribou Management Strategy recommended by the CCLUP Caribou Strategy Committee when available (expected summer 2001). ART stakeholders will be consulted during development of the final Caribou Strategy. See Map 10. • MELP and MOF will jointly provide operational guidance to minimise the area and duration of activity of all kinds in the Caribou areas.

Maximise protection from disturbance to the Caribou No-harvest Area.	• Only salvage harvest to a maximum of 10% of the Caribou No-harvest area per rotation. • Consider helicopter logging to minimize road construction. • Salvage harvest in the caribou no-harvest area in summer and early winter only, and ensure that snow can accumulate undisturbed on the

	roads after December 15 to hinder wolf and snowmobile access to the area. • Complete all activities as rapidly as possible after road construction has started. • All roads within caribou no-harvest areas should be temporary and closed to 4x4 pickup access except during harvesting, with open periods as tightly restricted as practicable. • Re-contour and (where possible) plant all roads in the Caribou No-harvest area as soon as possible after harvesting. • Close access within the Caribou No-harvest area to all non-industrial motorized vehicles, including cars, trucks, snowmobiles and ATV's.

4.10.4g Moose

Protection and maintenance of habitat for moose is a requirement of the CCLUP and is of particular importance for the ART SRP area. The declared provisions of the CCLUP include targets for each CCLUP zone and the following Strategy:

Moose and other Species

Moose are a particularly important species in the Cariboo region... They are the most widely distributed large mammal in the region and, as well as supporting wildlife viewing, they also support resident and guided hunting. In addition, moose account for the largest proportion of native sustenance kill in the region. Their habitat needs will be largely met through application of the FPC; of particular importance are the conservation of wetland and riparian areas. This management includes forested buffers around wetland and riparian areas. These habitats provide winter habitat throughout the region but are particularly important in ... IRM polygons ...B [Anahim Lake]...D [Kleene Kleene] .... Management of these areas for moose requires that both cover and early seral (shrubby) habitat is available. This can largely be provided if the biodiversity guidelines for the distribution of seral stages on a Landscape Unit basis are followed. Upland habitats are particularly important in [no ART areas listed]. Other aspects of moose habitat needs need to be addressed on a site-specific basis. This includes calving areas and summer habitat protection which can be addressed under the biodiversity conservation requirements and the access management targets specified for each polygon. Moose management also requires careful access management. Excessive access can produce disturbance and can result in high poaching or hunter harvest levels. All of the areas indicated above require access planning. This is particularly true in the IRM polygons and in [areas not in ART]. Limitations on permanent access and deactivation of temporary roads is required. Road crossings of wetlands and riparian areas should be limited as much as possible. Additional buffering of wetlands (up to 200 meters) may be required adjacent to key wetlands or riparian habitats, particularly on the Chilcotin Plateau.

Furbearers such as ...

An inventory is currently being conducted by Yun Ka Whu'ten in conjunction with MELP (funded by FRBC) for a portion of the ART SRP area to identify and assess wetlands associated moose habitat, which will eventually enable identification and prioritization of key wetlands for moose.

Objectives	*Strategies*
Protect and maintain sufficient quantity and quality of habitat for moose to maintain healthy populations of moose in perpetuity across it's historic range in the ART SRP area.	• MELP with associated partners will complete an inventory to identify key wetlands and riparian habitat areas for moose across the ART SRP area. • MELP in conjunction with MOF will develop and implement habitat management strategies to maintain suitable habitat conditions for moose across it's historic range in the ART SRP area, including forested buffers up to 200m adjacent to key wetlands and riparian habitats. • Once identified, key winter habitat areas for moose across the ART SRP area will be proposed for legal establishment as "ungulate winter range under Sec. 69 of the OPR of the FPC Act.

Manage key moose winter habitat to maintain habitat quantity and quality.	• Within key moose winter habitat areas
	  • Harvest large patches with interior leave patches, at one time. Complete each pass as quickly as possible;
	  • Incorporate protection and encouragement of the shrub layer in development of harvesting prescriptions, site preparation, stocking standards and vegetation management;
	  • Spot treatments or tightly localized vegetation management treatments are the most appropriate strategies;
	  • Maintain an "even-flow" harvest pattern over the rotation, so that all seral age classes are present at all times. Average harvesting over 20-year periods to demonstrate even-flow harvesting; and
	  • Consult with MELP when developing harvest proposals within key moose winter habitat areas.

Manage wetland associated moose habitat to maintain habitat quantity and quality.	• Outside key moose winter habitat areas, do not disturb more than 50% of a W1 or W5 wetland (including adjacent shrub habitat) Riparian Management Area in any 40 year period, or 25% within any 20 year period. • Design blocks with "creating edge" in mind, by incorporating leave areas throughout the interior of larger openings.

4.10.4h Marten and Other Furbearers

Protection and maintenance of habitat for marten and other furbearer species is a requirement of the CCLUP and is of particular importance for the ART SRP area. The declared provisions of the CCLUP include targets for each CCLUP zone and the following Strategy (Appendix VII):

Moose and other Species
Moose ...
Furbearers such as marten and fisher, waterfowl, and many other species benefit from the application of the guidelines under the FPC and access management. The requirement of this strategy is that the guidelines under the FPC and the regional biodiversity conservation strategy apply across the landscape and that fish and wildlife values be conserved through the application of the FPC at the landscape or lower level. These values should be sustained in any case.

Appendix VII, summarises the direction provided as well by the ART Consensus document regarding the importance of maintaining furbearer habitat across the SRP area. See Appendix X, for the original MELP Furbearer Impact Statement to the ART, which is still valid. However, sufficient information does not yet exist regarding the habitat requirements and distribution of the various furbearer species to develop detailed strategies for conserving the required habitat attributes either at the landscape or stand levels.

The Integration Report states:

> *"Research will be required in the future on a variety of values relevant to plan implementation. An important example of this is the identification and protection of furbearer habitat. Research results will be used to improve the implementation of the plan."*

Strategies to manage for furbearer habitat requirements will need to address those associated with leading spruce forest types as directed by the CCLUP, and these strategies can be closely linked and overlapped with the objectives outlined in Sections. 4.10.2c, 4.10.3a and 4.10.2g and regarding rare ecosystem representation in OGMA's and WTP's, and sensitive habitats and rare ecosystems in general.

Objectives	***Strategies***

Protect and maintain sufficient quantity and quality of habitat for furbearers to maintain healthy populations of all furbearer species in perpetuity across their historic ranges in the ART SRP area.	• MELP with associated partners will undertake inventory of furbearer species distribution and habitat requirements within the ART SRP area. • MELP in conjunction with MOF will develop and implement detailed habitat management strategies to maintain suitable habitat conditions for all furbearer species across their historic ranges in the ART SRP area. • Coarse woody debris is defined as debris that is more than 15 cm in diameter and more than one meter long. • Locate debris piles and manage post-harvesting access so as to avoid the need to burn piles to reduce fire hazard. Break large piles into smaller piles, or move them onto roads, to avoid using plantable space. • Leave deciduous stems to contribute to coarse woody debris in the future.

	• Leave dead and down trees in Riparian Management Areas unless these create a forest health concern.
	• Leave felled hazard trees on site unless there are overriding forest health issues.
	• Leave large debris and partly decayed logs that do not require removal under the utilization standards. These do not generally present a problem to planters or substantially affect plantable spots, yet they are of high value for soil nutrients and small mammals.
	• Leave piles of all available coarse woody debris scattered around each opening, where possible within 30 meters of mature forest. Debris pile characteristics that result in good wildlife habitat:
	  • Composed primarily of large diameter pieces (15+ cm), criss-crossed so as to create cavities within the pile.
	  • Dimensions should be about 3 meters wide, 6 meters long, and 3 meters high. Larger and smaller debris piles are less used by wildlife, and larger piles occupy plantable space.
	  • Preferably within 30 meters of mature timber.
	  • Preferably near riparian areas.

4.10.4i Northern Goshawk

Objectives	*Strategies*
Protect and maintain sufficient quantity and quality of habitat for Northern Goshawk to maintain healthy populations of Northern Goshawk in perpetuity across it's historic range in the ART SRP area.	• MELP with associated partners will undertake inventory of Northern Goshawk distribution and habitat requirements within the ART SRP area. • MELP in conjunction with MOF develop and implement habitat management strategies to maintain suitable habitat conditions for Northern Goshawk across it's historic range in the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures Guidebook.
Protect Northern Goshawk nesting areas, using the measures in the Managing Identified Wildlife: Procedures and Measures.	• Where possible, while still achieving Old Growth Management Area objectives, move a portion of Old Growth Management Area to overlap with Goshawk Wildlife LUO's.

4.10.4j Sandhill Crane

Objectives	*Strategies*
Protect and maintain sufficient quantity and quality of habitat for Sandhill Crane to maintain healthy populations of Sandhill Crane in perpetuity across it's historic range in the ART SRP area.	• MELP with associated partners will undertake inventory of Sandhill Crane distribution and habitat requirements within the ART SRP area. • MELP in conjunction with MOF will develop and implement habitat management strategies to maintain suitable habitat conditions for Sandhill Crane across it's historic range in the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures.

4.10.4k Mountain Goat

Objectives	*Strategies*
Protect and maintain sufficient quantity and quality of habitat for Mountain Goat to maintain healthy populations of Mountain Goat in perpetuity across it's historic range in the ART SRP area.	• MELP with associated partners will undertake inventory of Mountain Goat distribution and habitat requirements within the ART SRP area • MELP in conjunction with MOF will develop and implement habitat management strategies to

	maintain suitable habitat conditions for Mountain Goat across it's historic range in the ART SRP area, using the measures in the Managing Identified Wildlife: Procedures and Measures.

4.10.5 Fisheries and Watershed Management

CCLUP direction, and SRP objectives and strategies, for fisheries and watershed management are summarized below under the headings of watershed management, freshwater lake and stream management, and salmon management.

4.10.5a Watershed Management

Watershed management for maintenance of fish habitat is a CCLUP requirement including:
[Resource Targets for Charlotte Alplands and Itcha-Ilgachuz SRDZ and Anahim Lake IRMZ]:

- *To manage the Atnarko and Dean River watersheds for salmon stocks, through riparian area protection and controls on the rate of harvest.*

[Klinniklini River is also noted in DFO objectives and strategies]

[Strategy for Watershed Assessment]

- *As required under the FPC when disturbance levels exceed 25% and in key watersheds, a watershed assessment should be undertaken to ensure the maintenance of critical fish and wildlife habitats and hydrological stability.*

The proposed objectives and strategies for watershed management are:

Objectives	*Strategies*
Manage watershed disturbance levels across the ART SRP area to ensure the maintenance of critical fish and wildlife habitats and hydrological stability.	• MELP and MOF will jointly establish and implement objectives for all watersheds that meet or exceed Equivalent Clearcut Area requirements.

The CCLUP Integration analysis initially confined the Fisheries requirements to the five watersheds identified in the CCLUP to be managed for hydrological stability through watershed assessment, restoration work and monitoring (none of the five were in the ART SRP area). Equivalent Clearcut Area (ECA) levels of 20%, 25% and 30% were evaluated. Following completion of the initial strategy integration the remaining 11 watersheds with fisheries objectives stated in the CCLUP were evaluated, including the following two located in the ART SRP area: Atnarko River and Dean River watersheds. The results were:

Table 9. Integration Watershed Assessment Results in the ART SRP

Watershed	Unadjusted ECA* (% of watershed)	Adjusted ECA** (% of watershed)
Atnarko River	21	21
Dean River	27	27

* - the ECA of the watershed with no impact to timber access attributable to fisheries, based on the ECA for the specific strategies that occur in the watershed as well as the ECA for any private land, parks and crown land outside the productive forest land base
** - the ECA used in the Integration long term analysis with the five regional priority watersheds limited to 30 %, i.e. no effect on the two ART SRP watersheds.

From Integration report:

- ECA is used as an indicator of potential risk to fisheries and not a target in fisheries impact management – as an information flag it would indicate the need for further assessment, restoration and mitigation
- Risks to fisheries targets are to be mitigated through long term forest development planning [i.e. temporal distribution of cutblocks, see Section 4.10.2d and FPC requirements including riparian management, road construction practices, controls on the rate of harvest, and watershed assessment procedures. Other mitigative processes (including constraints to achieving other targets) may be required based on the results of watershed assessments
- An important example of assessment work is the report "An Inventory of Watershed Conditions Affecting Risks to Fish Habitat in the Cottonwood, Cariboo and Horsefly Watersheds", which identified placer mining, private land agricultural practices, and timber harvesting activities as the major contributors of risk to fisheries
- Technical processes to further address fisheries issues include watershed assessments, terrain hazard assessments, and additional fisheries risk assessments. On the basis of this and other information the MOF District Managers and the Designated Environment Official will address fisheries requirements through Forest Development plans and possibly 20 year forest development plans. Where FPC IWAPS are completed the result will provide recommendations to these officials. The SRP's and Landscape Unit Plans may also play an important role in linking operational planning to higher level planning objectives.

Other:

- DFO objectives and strategies in the CCLUP for salmon resources note that the Dean, Atnarko and Klinniklini Rivers support salmon downstream of the Cariboo-Chilcotin boundary, and that management of the headwaters is important to prevent downstream impacts on spawning and rearing habitat.
- The Klinniklini River was not included in the CCLUP Integration analysis and it's unadjusted ECA should be calculated and added to the ECA analysis.

In regards to the above reference in the Integration report to SRP's and Landscape Unit Plans linking operational planning to higher level planning objectives: the strategy in Section 4.10.2b above to monitor early seral landscape conditions by LU/BEC unit will

be useful. For reference to the 20%, 25% and 30% ECA test levels in the Integration report, the applicable early seral targets from the Biodiversity Guidebook that are to be used as an information tool for meeting future mature plus old seral targets are (i.e. maximum % of forest less than 40 years old):

Table 10, Early Seral Targets from the Biodiversity Guidebook.

BEC Zone	Maximum Early Seral Intermediate BEO	Maximum Early Seral High BEO
ESSF	36%	27%
MS	46%	35%
SBPS	66%	50%
IDF fir group	12%	9%
IDF pine group	54%	40%

The relationship between ECA and early seral (< 40 yr. stand age) varies and can be quantified according to the rate of logging and thus temporal distribution of cutblocks.

4.10.5b Freshwater Lake and Stream Management

CCLUP targets and strategies for lake and stream fisheries management include:

[Recreation Targets for each CCLUP unit address specific lakes and streams designated for management pertaining to backcountry condition and visual quality, i.e. non-habitat measures]
[Resource Targets for each CCLUP zone]:

- *To manage the Atnarko and Dean River watersheds for salmon stocks, through riparian area protection and controls on the rate of harvest.*

[Klinniklini River is also noted in DFO objectives and strategies]

- *To maintain riparian habitats through establishment of riparian management zones on all streams, lakes ....*
- *To manage a total of approximately 22 lakes as quality lakes for wilderness fisheries, broken down as follows:*
  - *Charlotte Alplands SRDZ – approx. 15*
  - *Itcha-Ilgachuz SRDZ – approx. 3*
  - *Anahim Lake IRMZ – approx. 2*
  - *Kleene Kleene – approx. 2*

[Strategy for Lake Management Plans]:
Lake Management Plans (including lake classification) should be prepared (over time and on a priority basis) for important lakes in all zones. Using a combination of Quality Lakes Management Planning, Lakeshore Harvesting Guidelines, Biodiversity Guidelines and Access Management, the Lake Management Plans should address specific and cumulative impacts to fish, fish habitat and the sport fishery (including allocation of the fisheries resource).

[Strategy for Research and Inventory]

* *monitoring of key Dolly Varden streams [assumed to include bull trout streams as well]. This species is sensitive to habitat disturbance and is a good indicator of a watershed's environmental condition*
* *priority lake and stream fisheries inventory required for classification purposes (FPC and Lake Management Plans).*

[text summary of Fish, Wildlife, Biodiversity and Water targets and strategies]:
- *Maintaining habitat requirements for key regional species including ...Dolly Varden trout.*

The above CCLUP targets and strategies for lake and stream fisheries are addressed in this SRP by the combined total of a number of elements including:
- a Lakes Classification Process has been completed for the ART SRP area and results have been incorporated into this recommended ART scenario (see Sec. 4.7 for recreation and visuals issues pertaining to lake and stream fisheries management).
- Stand level biodiversity measures for riparian habitat protection including a riparian reserve top-up to 20m width across the SRP area (see Sec. 4.10.3 including exception for Itcha-Ilgachuz SRDZ)
- Large CCLUP no harvest areas around the Dean River corridor and the majority of the Charlotte Alplands SRDZ including numerous lakes

It should be noted that the CCLUP does not provide a comprehensive framework for addressing freshwater lake and stream fisheries values, and thus for the SRP to be evaluated against. As such there may be aspect of these values that are not adequately addressed by this SRP. Possible examples include:

- Stream fisheries values not addressed by the lakes Classification process or the Dean River corridor.

- Genetic heritage values of wild rainbow trout stocks.

Notwithstanding the above, the habitat protection measures provided by this SRP are likely to result in a very low level of risk to freshwater fisheries habitat values across the ART SRP area.

4.10.5c Salmon Management

Protection of salmon habitat values is a CCLUP requirement:

[Resource Targets for Charlotte Alplands and Itcha-Ilgachuz SRDZ and Anahim Lake IRMZ]:

- *To manage the Atnarko and Dean River watersheds for salmon stocks, through riparian area protection and controls on the rate of harvest.*
- *[Klinniklini River also noted in DFO objectives and strategies]*

The federal Department of Fisheries and Oceans (DFO) Objectives and Strategies for Salmon Resources are a component of the CCLUP, and they clarify that the management concerns for all the above rivers are as headwaters that are important to prevent downstream impacts on spawning and rearing habitat.

This SRP has not added any new work to that contained in the DFO Objectives and Strategies, included in their entirety as Appendix XI.

4.10.6 Risks to Biodiversity, Fish and Wildlife

Biodiversity

- OGMA's are managed as set-asides, no provision for recruitment into old seral stage beyond the current rotation, assumption is made that there will be no natural disturbance in parks and other no harvest areas.
- LU/BEC units where high % of old target met in riparian/trails:
  - Should 10m – 30m reserves contribute to old forest
- high portion of EEA budget is invested in Charlotte Alplands which is 16,000 ha over target; Anahim Lake IRMZ 8400 ha under EEA target, Kleene Kleene IRMZ 6200 ha under EEA target and Itcha Ilgachuz SRDZ 1300ha under EEA target
- landscape connectivity insufficient in some areas with all the original large riparian corridor & wetland complex buffers deleted
- landscape level approaches for beetle management strategies are undefined
- Gap analysis with respect to Upper Dean LRUP measures not done
- pine mushroom ecology/habitats not addressed

Wildlife and Fish Habitat

- much inventory information not yet available, including results from furbearer and moose/wetlands inventories
- scenario EEA is maxed out with respect to timber targets, no buffer is left to accommodate new inventory information or measures to address it
- fisher - need more landscape connectivity, some 100m riparian corridor/wetland complex buffers
- moose - no <=200m buffers around key wetlands
- other furbearers – marten
- wild rainbow trout stocks/genetic heritage

Recommended Conservation Assessments

- moose
- fisher and other furbearer species
- landscape connectivity
- sensitive habitats and rare ecosystems
- leading spruce forest types

4.11 Future Settlement Lands

The SRP supports the ability of existing centres of development (residential, commercial and industrial) to continue to expand, consistent with the objectives and strategies of the SRP.

Objective	*Strategy*
Provide for future settlement areas for residential, commercial, and industrial use.	• Statutory decision makers should support the release of lands from the Forest Land Reserve (FLR) and the Provincial Forest, consistent with the previously stated objectives and strategies, adjacent to existing settlement areas for this use. • Allow development of Crown Land through the Land Act application and referral process, for all purposes, consistent with the objectives and strategies of the SRP, including major tourism developments in previously undeveloped areas and the ability to provide services (power, water, roads) to existing private lots. • Support local government initiatives by providing access to land for infrastructure or institutional purposes.
Provide for the expansion of agriculture.	• Statutory decision makers should allow the release of class 1-5 agricultural land from the FLR and the Provincial Forest for the growth of agriculture in the

	area. Releasing land for non forest uses will result in a minimal reduction in the size of the available land base for forest harvest activities.
Provide development access to reserved land.	• Lands reserved for the Use, Recreation and Enjoyment of the Public should be considered for release from reserve status by BCAL, following review and consultation with MELP, MOF that should include ART SRP recommendations. Lands should not be released unless agreed to by the agency in whose name the reserve is recorded.

5.0 SRP TARGETS, ASSUMPTIONS AND ANALYSIS

The ART SRP process has closely met the total targets set out in the CCLUP for the ART planning area. The targets were achieved as a balance between the SRDZs, and IRDZs. There was an overall transfer of EEA target from the Anahim Lake, Kleena Kleene and the Itcha-Ilgatchuz sub zones to the Charlotte Alplands sub zone. Flexibility for the transferring of EEA across subzone boundaries is consistent with the Integration Report.

Background

This section documents the analysis undertaken as part of the ART SRP to evaluate the effect of meeting the CCLUP non-timber strategies and targets along with implementing landscape requirements of the Forest Practices Code on the CCLUP timber target.

The analysis deals with access to the land that is part of the "productive forest land base". The CCLUP Integration report uses EEA as the common denominator to compare the effects of management strategies that have the effect of lengthening the theoretical rotation ages relative to the rotation length assumed by the Integration Report. Note that the CCLUP targets relate to access to land, not volume.

Mapped Layers

Mapped inputs used in the SRP analysis are as follows:

- Forest District Boundary
- Biogeoclimatic Ecosystem Classification (BEC)/Natural Disturbance Types(NDT)
- Landscape Unit Boundaries (1998 lines were used in Analysis, Map 8a, and the LU lines have been updated in 2000 as shown on Map 8b.
- Visual and scenic polygons
- Identified Trails
- Community Areas of Special Concern

- Forest Cover
- Updated Harvest History for Chilcotin Forest District
- CCLUP Sub Zones
- Western Caribou Modified and No Harvest areas, 1998 Update Strategy
- Parks and Goal 2 areas
- Lakes Classification from the Chilcotin Forest District
- Riparian buffers

Non Spatial Information

The following non mapped inputs were included in the analysis in a non spatial form:

- Riparian top up
- WTP's
- OGMA's

GIS Analysis

All inputs used for analysis were overlaid using Arc Info software. Paragon Mapping completed the overlap analysis in Williams Lake.

Other mapped inputs not used in the numerical analysis are:

- Backcountry Units
- Final spatial location of OGMA's
- Flight Corridors

Boundaries

Since the initiation of the ART planning process the Chilcotin Forest District boundary has increased in size. This additional area was not included in the ART SRP analysis and there is now a need for an amendment to the CCLUP to have this +/- 7514 hectares included the CCLUP planning area. The additional area is described and mapped in Appendix XII.

Partial CCLUP Sub Zones

Of the four CCLUP sub zones within the ART sub regional plan area, two are not completely contained within the ART sub regional plan boundary. The Itchas Ilgatchuz and the Kleena Kleene sub zones were analysed only within the ART SRP planning area. Results from the ART SRP will need to be balanced with the Chilcotin SRP results during future analysis of the Chilcotin SRP.

Productive Forest Land Base

Targets deal with the amount of "productive forest land base" as defined in the CCLUP. For the ART SRP analysis the following areas were deducted from the total land base:

- Private ownership, leases, and some reserves.

- All non-productive, (anything with a non-productive code). This includes water features, alpine, some alpine forest, rock, brush, open range, etc.
- Parks, Goal 1 and Goal 2 Protected Areas, with the exception of evaluation for biodiversity requirements.
- GIS slivers that did not have a forest cover polygon number.

Riparian

All FC1 single line streams, with slopes less than 20 percent, were assumed to be S3 streams. These S3 streams were then buffered with a 20 meter RRZ as well as 20 meter RMZ. These buffers were applied on both sides of the streams for a total of 80 meters per stream. This additional 20 meter RMZ buffer was assumed to have only 50 percent retention, and of that 50 percent retention, 50 percent was assumed to be available for harvest.

All FC1 double line streams were assumed to be S2 streams. Buffers for reserve and management zones are consistent with the Riparian Management Area guidebook.

The estimation of 20 percent for slope around streams was determined by hand drawing a polygon shape using a 1:100 000 mapping of slope class analysis within PAMAP.

A Riparian top up was used to specify 20 meter no harvest buffers on streams and wetlands that increased the riparian contribution to 6 percent of the productive forest. This was done to quantify an assumption presented by the community through the ART, which was consistent with the CCLUP Integration assumption of 6 percent. The buffer applied at the sub zone level. See Appendix XIII for the Riparian Top up Analysis Summary.

The Chilcotin Forest District completed a public Lakes Classification process for the ART planning area. A, B, C, D and E lakes had public review to achieve a consensus on lakeshore reserve and management zone recommendations. The ART SRP analysis used mapped buffers as per the consensus reached at the public meetings. (See map 7 and Appendix V for summary of Lakes classifications)

Community Areas of Special Concern

Community Areas of Special Concern (CASC), known locally, as Community Preservation Polygons are areas deemed by the ART community as requiring special resource management consideration. The CASC were identified by the community's interpretation of the 1998 FRBC funded *Charlotte Alplands SRDZ Forest Recreation and Wilderness Tourism Opportunities Study*. The management prescription modelled in the analysis was for no harvest. The EEA factor used for CASC's in the ART SRP analysis was 1.0. Therefore it is recommended in this report that no commercial salvage (for fire or beetle salvage) harvesting operations take place in these CASC's. It is understood that the SDM has authority under the Ministry of Forests Act Sec 4b) to manage, protect and conserve the forest resource in the short and long term. This could require the cutting of trees for fire control under the Timber Harvesting Practices Regulation or as required for emergency forest health control in the event of severe natural disturbances. The DM and

the DEO in consultation with DFO and the ART should jointly agree on considerations for activities in CASC's. At any time if it is determined through analysis, that the recommended options are inconsistent with targets set out in any designated higher level plans other options will be revisited.

Western Caribou, Itchas Ilgatchuz

The 1998 Caribou Strategy Update lines for Modified and No harvest areas for the Itchas Ilgatchuz Caribou were used in this analysis. Integration targets for Caribou no harvest were adjusted through re analysis in January 2000 using the updated SRP boundaries. This provided a more balanced assessment of the entire target distribution over the rest of the Chilcotin Forest District, the Kluskus planning area and the ART planning area. See Appendix XIV.

Trails

Inventoried trails have been analysed using an average no harvest buffer of 30 meters plus an additional 20-meter modified harvest buffer. See Map 6 for identified trails for this analysis.

Summary of EEA Values

Long term analysis uses equivalent excluded area, (EEA) as a common unit to measure the impact of non-timber strategies, (or constraints), on the timber harvesting landbase. The EEA is based on the difference between a strategy rotation age and the base rotation age. For example: a strategy implies an increased rotation of 160 years and the normal rotation is 80 years, then the EEA would be, 160 subtract 80 then divided by 160 to equal 0.5. This EEA Factor is then multiplied by, the area the strategy occupies, to reflect the impact on the timber harvesting landbase.

The following is a summary of the EEA factors by constraint used in the ART SRP analysis;

Constraint	Species	EEA	Assumption Description
Riparian Stream RRZ	All	1.00	RRZ modelled spatially with a non spatial Riparian top up to 6 percent.
Riparian Stream RMZ	All	0.25	50 percent of the buffer is to be retained with an additional 50 percent salvage.
Riparian Wetland RRZ	All	1.00	Includes the Riparian top up
Riparian Wetland RMZ	All	0.25	For all the areas not topped up to reserves.
Riparian Lakes LRZ	All	1.00	LRZ for class A lakes as per the Chilcotin District public classification process. See Appendix V.

Riparian Lakes LMZ	Pine	0.60	LMZ's for class B as per the Chilcotin District public classification process. See Appendix V.
Riparian Lakes LMZ	Non Pine	0.40	LMZ's for class B as per the Chilcotin District public classification process. All other lake classes have an EEA of 0.00. See Appendix V.
Community Areas of Special Concern (CASC)	All	1.00	Charlotte Alplands, Dean River corridor and other areas as mapped.
Trail Reserves	All	0.90	30 meter no harvest buffer on both sides of all mapped trails.
Old Growth (OGMA's) Longterm – Residual	All	0.90	Integration Report (IR) states 10% available for salvage.
Western Caribou, No Harvest, 1998 update lines	All	1.00	EEA for all Caribou areas are based on the 1998 Caribou Strategy rotation ages.
Western Caribou, Modified Harvest, Arboreal, 1998 update lines	Pine	0.66	Arboreal lichen areas were estimated to occupy 20 percent of the modified area.
Western Caribou, Modified Harvest, Arboreal, 1998 update lines	Non Pine	0.50	Arboreal lichen areas were estimated to occupy 20 percent of the modified area.
Western Caribou, Modified Harvest, Terrestrial, 1998 update lines	Pine	0.43	Terrestrial lichen areas were estimated to occupy 80 percent of the modified area.
Western Caribou, Modified Harvest, Terrestrial, 1998 update lines	Non Pine	0.14	Terrestrial lichen areas were estimated to occupy 80 percent of the modified area.
Visuals Retention	Pine	0.80	As mapped, 5% disturbed at a time.
Visuals Retention	Non Pine	0.50	As mapped, 5% disturbed at a time.
Visuals Partial Retention	Pine	0.80	As mapped, 5% disturbed at a time.
Mule Deer Winter Range	N/A	N/A	None in planning area.
Mature versus Rotation Age	Pine	0.20	To show the difference between an 80 year rotation age and a mature age value of 100 years.
Wildlife Tree Patches	N/A	N/A	Non Spatial, as per Chilcotin Forest District guidelines for each LU. Calculated as per table 20 b) of the Biodiversity Guidebook less 3 percent then divided by 2. IR states 50 percent available within one rotation.

Overlap Analysis Table Description

A separate overlap analysis table was completed for all four CCLUP sub units within the ART SRP area, Appendix XV. The constraints were arranged in a ranked order from the

most constraining to the least constraining, and adjusted so that no double counting of area was included in the constraints as they descended in order. This overlap analysis table then calculates the net impact of each ranked constraint with respect to percent of the productive forest landbase required for that constraint. This includes both no harvest and modified harvest areas. Modified harvest areas have set EEA factors to allow the calculation of the percent of the productive forest landbase required for that constraint. The percentage of the productive forest landbase required for each constraint is then summed for the entire sub unit and compared to target percents from the Integration Report to determine if the sub unit is over or under targets for constrained area. The total percentage of the area of productive forest unavailable that is constrained in each subunit is summarized and compared with the Integration targets in Appendix XV.

Wildlife Tree Patches

Non spatial WTP requirements were determined from Table 20a) of the Biodiversity Guidebook. Each Landscape unit allocation was then reduced by 50 percent to allow for an assumption of 50 percent salvage.

Integration assumptions that WTPs do not impact on Mule Deer or Caribou modified harvest are dealt with in the Overlap Analysis Table.

WTP Overlap Assumptions

- 50% of the stream RRZ is available to meet WTP requirements (from the Integration Report)

Old Growth Management Areas

Old requirements by Landscape Unit/NDT/BEC as described in the Biodiversity Conservation Strategy and by Draft Landscape Unit biodiversity emphasis option were determined. The analysis used the enhanced BEO scenario recommended in this plan. Using the Planning and Analysis of Old Forest Requirements in SRP's procedure, Appendix VIII, a non-spatial residual OGMA requirement was calculated for each Landscape Unit/NDT/BEC. These residual old requirements were summed by CCLUP sub unit and used in the overlap analysis.

Three public workshops were held to aid in the spatial placement of the OGMA requirements.

A transitional strategy was also completed. An analysis was conducted to determine the age class distribution of constrained areas, from which sunset dates for transitional OGMA areas was determined.

The long term and transitional OGMA's from the workshops were then digitized and analysed with respect to seral requirements. Refinements were done to ensure all targets were balanced according to the analysis. A final public workshop was arranged to agree on the final longterm and transitional OGMA placement. The meeting notes for the

OGMA workshops and the OGMA planning data summaries are included in Appendix XVI.

OGMA Overlap Assumptions

- All riparian RRZ is assumed to contribute 100% to old targets. This includes stream, lake and wetland no harvest areas.
- For the Riparian Top up wetland RMZ were converted to no harvest and contribute 100 % to the old targets.
- Community Areas of Special Concern contribute 100 % to the old target.
- Trail reserves contribute 100 % to the old targets.
- Parks contribute 100 % to the old targets.
- All Caribou no harvest is assumed to contribute 100% to the old target.
- Retention (R) visuals and the arboreal portion (estimated at 20%) of caribou modified harvest assumed to contribute to the old target based on the difference between the estimated rotation age and the minimum age for old seral for the applicable biogeoclimatic zone; for modified harvest contributing to old, a 20 year "planning buffer" was subtracted from the rotation age difference to provide a reasonable planning window for future spatial relocation of old contribution
- WTP requirement was not overlapped with the old target due to balancing of modified harvest and other overlap assumptions.

***NOTES:**

- Some of the assumptions listed above may be subject to adjustment according to ongoing Regional guidance.
- The procedure outlined in the "Planning and Analysis of Old Forest Requirements in SRP's", document (Appendix VIII) was supplemented by a step to ensure minimum "Interior Forest Conditions" requirements were met as outlined in the Biodiversity Guidebook.
- The maximum overlap of old requirements onto the parks and large no harvest areas (CASC's) has two implications. The first is that there is some double counting the park contribution to the old seral stage targets since the Biodiversity Strategy contains a 12% initial deduction for park areas which was not achieved in some biogeoclimatic zones. The second is that all productive forestland within the parks and CASC's used for the overlap is assumed to eventually attain an old seral stage, without regard for the effect of insects, disease, mechanical damage and fire. The effect of these assumptions is not quantified at this time.

6.0 LANDSCAPE UNIT PLANNING

A landscape unit planning sub committee (LUPSC) of the ART, that also includes Agency staff, has been formed in the year 2000 to work on a pilot project of three landscape units in the ART SRP area. The intent of the sub committee is to review draft

Landscape unit objectives presented by the Agencies as well as develop draft landscape unit strategies to accomplish draft LU objectives.

List of Appendices

Appendix I	ART SRP Terms of Reference.
Appendix II	Boundary Intent for the Klinaklini River Goal II Area.
Appendix III	ART Access Management Sub Committee, Access Management Final Report.
Appendix IV	Backcountry Management Direction.
Appendix V	ART Lakes Sub Committee, Lakes Classification Summary.
Appendix VI	ART Consensus Document (1994) – Measures to Conserve Biodiversity, Fish and Wildlife.
Appendix VII	CCLUP Legal and Policy Framework for Legal Establishment of Biodiversity Strategies.
Appendix VIII	Planning and Analysis of Old Forest Requirements in SRP's.
Appendix IX	Biology of the Regionally Important Wildlife species in the ART SRP Area. (Excerpts from IWMS).
Appendix X	MELP Furbearer Impact Statement to the Anahim Round Table.
Appendix XI	DFO Objectives and Strategies for Salmon Resources.
Appendix XII	Chilcotin Forest District Boundary Changes.
Appendix XIII	ART SRP Riparian Top-Up Analysis Summary.
Appendix XIV	Adjusted Integration Targets around Itchas Ilgatchuz Caribou.
Appendix XV	ART SRP Analysis, Overlap Tables.
Appendix XVI	OGMA Planning Notes

Presentation of the ART SRP to IAMC
December 1st 2000

Introduction: Want to touch on five things.

- The People Involved and the Real Product
- The ART SRP TOR
- Highlights of The ART SRP
- Outstanding Items in the Plan
- Conclusion

I) What are we presenting and who is presenting?

Of course it's the ART SRP but:

What we have, is a wrap up of eight years of planning, in the Anahim area. The last four years under the guidance of Sub Regional Planning. It is not just text and maps but what I would like to say is proof of a better understanding and the evidence of the communication that has happened, between all stakeholder in the plan area. With some pain, and a lot of compromise, I can say we now have agreement, and or, have a better understanding of all the objectives and strategies required to accommodate all the representatives.

Who are the signatories representing? Representatives include members of; the Anahim Lake Cattlemen Assoc., Anahim Lake Community Assoc., Anahim Round Table Chair, BC Wildlife Federation, Blackwater Ootsa Comm. Assoc., Charlotte Lake Lease Landowners, Chilcotin Guide Outfitters Assoc., Chilcotin Trappers Assoc., DWB Forestry, BC Assets and Lands Corp., B.C. Environment, Min. of Energy and Mines, MOF Region, MOF Chilcotin Forest District, B.C. Parks, Min. of Small Business, Tourism and Culture, Kleena Kleene Resource Assoc., Nimpo Lake Community Assoc., Ulkatcho Indian Band, West Chilcotin Forest Products, West Chilcotin Tourism Assoc., and finally Yun Ka Whu Ten Holdings.

II) ART SRP TOR

I feel the IPT and the Community have accomplished the tasks outlined in the **ART SRP TOR.**

The **purpose** of the ART SRP was to implement land use designations, targets and strategies identified in the CCLUP. This includes the Caribou and the Biodiversity Conservation Strategy, and the balancing of the targets outlined in the CCLUP 90 day Report and the Integration Report. This plan has done that. As well it has enhanced some strategies and still found an overall balance of the specified targets, plus or minus less than 2 percent. Overlap Analysis summaries to show this are found in Appendix Fifteen.

The **goal** of the ART SRP TOR was to integrate the ART Consensus Document, called the *"ART Resource Management Plan"* with *CCLUP* and the Strategic planning requirements of the Forest Practices Code. I feel this was accomplished and is well summarised in Appendix seven. Contents of the Charlotte Alplands SRDZ Forest Recreation and Wilderness Tourism Opportunity Study were also considered within the ART SRP.

This plan includes results, and recognises the work of past **subcommittees**, including the Access Management Sub Committee with its Final Report, the Lakes Classification Sub Committee and will, continue, with the pilot, Landscape Unit Planning Sub Committee. The Pilot LUPSC will look at three Landscape Units and review draft LU objectives and work to recommend proposed draft LU Strategies.

All of the **TOR objectives** of the ART SRP have been accomplished;

- In particular we have been consistent with the IAMC and the RRB Planning Strategy.
- We have had Native and non Native communities working together to solve local resource management issues,
- The plan will provide clearer information for the SDM's.
- The very delicate balance of objectives and strategies and the assignment of Agency responsibility to these objectives and strategies, as well as the recommendation for Inter Agency and Community consultation when fulfilling these strategies, is invaluable information for Agencies to be used at the operational level.

In quick summary for the **deliverables** specified in the ART TOR, requesting mapping of conventional, modified, and no harvest areas, the defining of Biodiversity Objectives and Strategies including spatial OGMA planning, the request for Scenic and VQO Areas and for providing recommendations around Access management have all been completed. In fact I feel we have delivered much more and this is evident by just looking at the table of contents of the plan.

III) Plan Highlights include;

- The recommendation of four Community Areas of Special Concern, including the Charlotte Alplands and the Dean River Corridor. **CASC's, Map 1**

- The enhancement of eight of the sixteen Landscape Unit Biodiversity Emphasis Option's from either Low to Intermediate or Intermediate to High. As a result of this enhancement there was less than a 1000 hectares of OGMA's required to be placed outside of constrained areas, to meet Biodiversity targets for OLD. **BEO Emphasis Option, Map 8a**

- Through four public workshops starting in July 2000 and finishing in November 2000 we have accomplished agreement on the placement of Longterm, Transitional and

Alternate choices of Old Growth Management Areas. These areas, as well as assuring targets for biodiversity are met, hold very high importance to the Natural Resource and Culture Committee, the Ulkatcho Community members and the Guide Outfitters Association. In fact I think this is one of the very high points of this plan. This Old Growth planning process, closely followed the document "Planning and Analysis of Old Forest Requirements for SRP's," with an additional allowance, to cover Interior Forest Condition. (ie old 200 m from early seral) We had analysis completed to allow the placement of both longterm and transitional OGMA's as well as having the ability to estimate the sunset date for the transitional OGMA's. **OGMA's, Map 9**

- This plan includes the recommendation for a new community proposed Goal II area in the Kleena Kleene Valley, expected to replace the existing candidates. **Goal II, Map 2**

- And finally although broad in scope for a highlight, this plan presents a compilation of a wide range of objectives and strategies, recommended by the signatories, to allow the progression of resource planning in the ART area, to move to Landscape Unit Planning.

- Just briefly I would like to mention the text and overview maps and Summary of EEA Values on Page 87.

IV) Attachments and Outstanding items, include:

- The need for minor boundary adjustments around the CASC's to confirm that they are in line with the ESSF, Bio Geo Climatic Zone boundaries, which was the understood intent of these areas.

- A need for further review time for the Ministry of Energy and Mines to explore road access around the new proposed Goal II area. MOF and Forestry consultants have already explored and feel comfortable with this boundary but Mines wanted an extension of time. They also wanted it attached to the ART SRP document submitted for approval. The recommended wording change is *"The recommended Goal II area will be more thoroughly reviewed to ensure reasonable access is possible and or required, around the proposed location. Review will be completed within 6 months of the signing of the document." ie. Nov 23, 2000.*

- Some final Quality Lake for Wilderness Fisheries designations are to be completed as part of the Landscape Unit Planning, possibly with the LUP Sub Committee.

- The SRP is presenting Longterm and Transitional OGMA's as reviewed by the Community, and the IPT, but there is still a buffer of additional areas required to fully meet the targets. This will be done through Landscape Unit Planning.

- And finally OGMA Workshop notes for the Appendix are still in progress but just about wrapped up.

V) Conclusion

In **Conclusion** as stated on the signature page; The Interagency Planning Team (IPT) and the Anahim Round Table (ART) hereby provide the Anahim Round Table Sub Regional Plan to IAMC as required in the Terms of Reference. This plan represents a balance arrived at by the Anahim Round Table community group as well as by the Agency participants on the IPT. The IPT and the ART recommend that IAMC and RRB accept and endorse this plan as an option that meets the requirements of the CCLUP.

If there are any questions or need for more details I have my key IPT members here to help out.

Finally Thanks for your Time!!

Beverly Frittenburg
Resource Planning Forester, Cariboo Forest Region
Chairperson, ART SRP IPT.

BRITISH COLUMBIA

File: 204-20/IAMC/Corr

March 6, 2001

To: District Managers, Cariboo Forest Region
Designated Environmental Official, MELP, Cariboo Region

Re: Endorsement of The Anahim Round Table Subregional Plan

The Anahim Round Table Subregional Plan is endorsed by IAMC and RRB for use in the implementation of the CCLUP. This endorsement is given with the understanding that a review of all of the SRP's will be undertaken upon completion of the last SRP in the region to ensure that, on a regional and zonal basis, the CCLUP targets will be achieved. Adjustments to the SRP's may be required if it is found that not all of these targets are achievable.

This endorsement is subject to the following:

The ART SRP utilised no-harvest within the plan area to create Community Areas of Special Concern, the largest of approximately 21,100 hectares is located in the Charlotte Lake SRDZ. The ART SRP, within Section 4.9, states:

> *This implies no commercial harvesting operations take place in these CASC's. It is understood that the SDM still has authority under the Ministry of Forests Act Sec41(b) to manage protect and conserve the forest resource in the short and long term. This could require the cutting of trees for fire control under the Timber Harvesting Practices Regulation or as required for emergency forest health control in the event of severe natural disturbances.*

The IAMC agrees with the SRP statements regarding the need to address fire control and forest health in no-harvest areas. However, depending on the circumstance, some level of harvest may be required. Clearly this must be done in a sensitive manner which recognises the non-timber values in these areas, however forest health and fire control issues must be addressed. Plans to control wildfire will be site specific and will require an extremely quick response. The Ministry of Forests should discuss this with the ART in the near future.

IAMC cannot, however, endorse or accept the statement that no commercial harvest will take place since the CCLUP states :

> *The portion of the total forest that, due to other resource values, is not presently available for harvest under current forest management regimes. Some of these areas are*

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expected to become available in the future provided that retention of other resource values, particularly wildlife, can be ensured.

In the near or medium terms commercial harvest for salvage purposes may have to be considered in no harvest areas where the mountain pine beetle or other natural disturbance have an impact on the area. Of particular concern will be whether or not the non-timber values which resulted in the creation of these no-harvest areas are degraded. In general, more stringent criteria will be applied both in the planning and approval of any logging or access development required for commercial salvage in no-harvest areas. As well, the availability of alternate areas on the forest land base to support these values will have to be considered. In some cases the evaluation will indicate that commercial harvest is not appropriate at levels of tree mortality that would trigger salvage elsewhere on the forest land base, particularly where alternative areas to support the non-timber values are not available.

In addition, in the case of the *Charlotte Lake CASC*, any proposed salvage logging or associated access development must be minimised in order to be compatible with the objectives of the SRP, and must be discussed with the ART table members before it is put into place. A careful balancing of all of the objectives will be required. Access development planning will include a commitment to rehabilitation, where required, to meet the non-timber values.

An outstanding issue identified by the Interagency Planning Team (IPT) is confirmation that the proposed Goal #2 protected area does not restrict access, outside of the protected area, to the mining industry. This is one of a list of outstanding items that are currently being completed by the IPT. IAMC's endorsement of the ART SRP is with the understanding that the outstanding tasks will be satisfactorily addressed.

Based on the analysis provided by the Interagency Planning Team, the ART SRP is consistent with the CCLUP timber access targets as prorated across the ART plan area. IAMC will assess the achievement of the HLP zonal timber targets once all of the SRP's are completed, and a zonal roll-up is completed across the entire area of the CCLUP.

Yours truly,

Herb Langin
Chair

cc: IAMC Members
ART SRP IPT
Chair, Regional Resource Board

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ART Sub Regional Plan
November 23rd, 2000

The Interagency Planning Team (IPT) and the Anahim Round Table (ART) hereby provide the Anahim Round Table Subregional Plan to IAMC and RRB as required in the Terms of Reference. This plan represents a balance arrived at by the Anahim Round Table community group as well as by the agency participants on the IPT. The IPT and the ART recommends that IAMC and RRB accept and endorse this plan as an option that meets the requirements of the CCLUP.

In providing this recommendation the IPT notes that if any further analysis or information indicates that any part of this report is not consistent with the Higher Level Plan targets of the CCLUP, the recommended option in this report will be revisited.

Name	Affiliation	Signature
Bryce Sager	Anahim Lake Cattlemen Assoc.	Bryce Sager
Pat Davey	Anahim Lake Community Assoc.	
Dave Neads	Anahim Round Table, Chair	D Neads
Ted Christian	BC Wildlife Federation	
Bill Van Es	Blackwater Ootsa Comm. Assoc.	
Alice Harris	Charlotte Lake Lease Landowners	B Slater for Alice Harris
Dave Dorsey	Chilcotin Guide Outfitters Assoc.	
Steve Richburg	Chilcotin Trappers Assoc.	
Dave Bedford	DWB Forestry	
Sharon Whitely	IPT, BC Assets and Lands Corp.	Sharon Whitely
Clinton Webb	IPT, B.C. Environment	
Jim Britton	IPT, Min. of Energy and Mines	CONDITIONAL ENDORSEMENT. SEE NOTE ATTACHED (28 Nov/00)
Beverly Frittenburg	IPT Chair, MOF, Cariboo Region.	
Simon Crawley	IPT, MOF, Chilcotin District.	
Glen Davidson	IPT, B.C. Parks	

Brenda Hartley	IPT, Min. of Sm Business, Tourism	
Ken Jansen	Kleena Kleene Resource Assoc.	
Lise James	Nimpo Lake Community Assoc.	
Allan Weselowski	Ulkatcho Indian Band	
Steven James	West Chilcotin Forest Products	
Petrus Rykes	West Chilcotin Tourism Assoc.	
Laurie Vaughn	Yun Ka Whu Ten Holdings	
Peter Fofonoff	Ministry of Agriculture	